

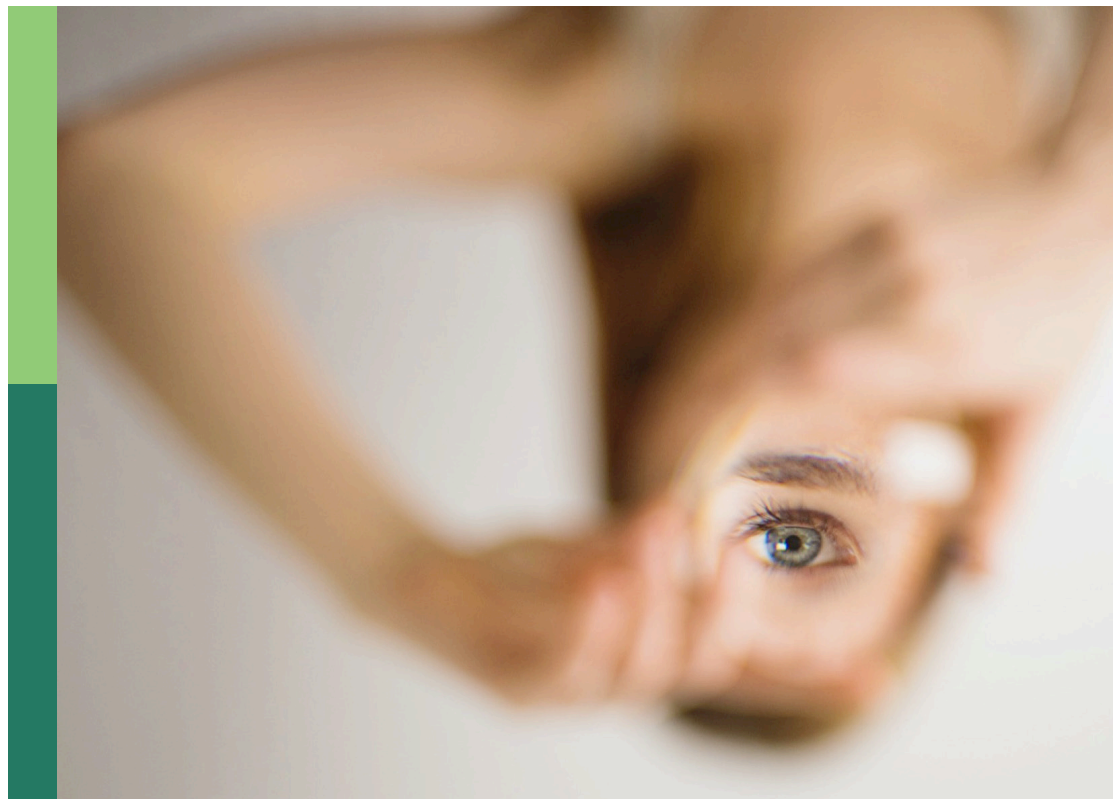
Compassion: From neuroscience to new horizons and innovative, inclusive research agendas, 2nd Edition

Edited by

Kathryn Waddington, Julian Manley, Trudi Edginton
and Jason Kanov

Published in

Frontiers in Psychology



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ISSN 1664-8714
ISBN 978-2-8325-4230-9
DOI 10.3389/978-2-8325-4230-9

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Compassion: From neuroscience to new horizons and innovative, inclusive research agendas, 2nd Edition

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Citation

Waddington, K., Manley, J., Edginton, T., Kanov, J., eds. (2023). *Compassion: From neuroscience to new horizons and innovative, inclusive research agendas, 2nd Edition*. Lausanne: Frontiers Media SA. doi: 10.3389/978-2-8325-4230-9

Publisher's note: This is a 2nd edition due to the removal of a Topic Editor.

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OPEN ACCESS

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RECEIVED 19 October 2023
ACCEPTED 30 October 2023
PUBLISHED 06 November 2023

CITATION
Waddington K, Manley J, Edginton T and
Kanov J (2023) Editorial: Compassion: from
neuroscience to new horizons and innovative,
inclusive research agendas.
Front. Psychol. 14:1324381.
doi: 10.3389/fpsyg.2023.1324381

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Editorial: Compassion: from neuroscience to new horizons and innovative, inclusive research agendas

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KEYWORDS

compassion, neuroscience, organizations, leadership, ethic of care, health psychology, compassionate pedagogy

Editorial on the Research Topic

[Compassion: from neuroscience to new horizons and innovative, inclusive research agendas](#)

This Research Topic issue follows on from “Expanding the Science of Compassion” ([Mongrain et al., 2021](#)), which explored the neuroscience, physiological, psychological, and environmental aspects of the experience of compassion. This issue extends the understanding of compassion to include compassion in health psychology, pedagogical practice in higher education, organizations and leadership. It introduces innovative approaches from scholars working in diverse research contexts that include South Africa, Sri Lanka, and Slovenia, and highlights new horizons for organizational neuroscience research.

Compassion in health psychology

[Sandham and Deacon](#) undertook a rapid review (16 articles) into the role of self-compassion into diabetes and its management. Their main findings were that self-compassion is associated with improved health outcomes (psychologically and medically) and can be enhanced through interventions such as the mindful self-compassion program. Self-compassion also features as a key factor in [Halamová et al.’s](#) analysis of best coping practices during the COVID-19 pandemic. Their study used the COPE Inventory to measure functioning coping behaviors with 1,683 Slovak nationals, followed by qualitative interviews with a randomly selected sample of nine participants with highest scores on all 15 subscales. Adaptive coping strategies were categorized into four domains, with self-compassion most frequently mentioned and elaborated upon, followed by compassion to *and* from others, and mutual compassion or “suffering together”. These two studies highlight the relationship between self-compassion, self-compassion training/interventions and well-being, which extends beyond health psychology to other areas of applied psychology. For example, see [Kotera and Van Gordon’s \(2021\)](#) systematic review which demonstrates that self-compassion training can be effective in improving work-related well-being outcomes.

Compassion in pedagogical practice

Jayasundara et al.'s mixed methods study used Gilbert's (2015) psychobiological model of compassion of: (i) drive; (ii) threat detection; and (iii) self-soothing, to inform a Cognitive Skills of Compassionate Communications (CSCC) training intervention for online group work meetings. Science, Technology, Engineering and Mathematics (STEM) students, from five Sri Lankan universities showed a significant improvement in screen-gaze attentiveness to one another, after the CSCC intervention. Lister et al. used a survey instrument co-designed with students with disclosed mental health conditions to examine barriers and enablers to student mental well-being in distance learning in a UK university. Assessment and life circumstances were the most significant barriers; enablers included curriculum and module content and building study skills. Students with disclosed mental health difficulties were consistently more likely to experience barriers, while enablers were experienced by all demographic groups. Hamilton and Petty's conceptual analysis of compassionate pedagogy for neurodiversity in higher education draws on principles of compassion-focused psychological therapies. Their article, framed within the neurodiversity paradigm, challenges pathologizing accounts of neurodevelopmental differences, including attention deficit disorder (ADHD), dyslexia, autism, developmental language disorder (DLD) and others. It considers how compassion can be enacted in curriculum design, interpersonal interactions, and leadership cultures in universities. A further two articles report original research into organizational compassion and leadership in universities (Denney; Pule and Gibney), reinforcing our argument that research into compassion must take place in compassionate institutional cultures.

Compassion in organizations and leadership

Denney's qualitative study into how compassion was experienced in UK universities during COVID-19 also reveals the need for compassionate leadership cultures. A distinction is drawn between "formalized" compassion processes that prioritize compassion for students over that of staff, and "informal" compassion shown between staff. This study revealed failures in organizational compassion in higher education, with consequent staff suffering as a result of structurally embedding compassion for students. When seen alongside Jayasundara et al.'s work, these two studies emphasize the relevance of compassion for staff and student well-being in higher education organizational policy and practice (see also Waddington and Bonaparte, forth coming).

Pule and Gibney's qualitative study uses social dream drawing—a variation of the standard social dreaming approach—to investigate the quality of listening in the context of students and student leaders in South Africa. This study highlights the importance of inclusion of under-represented voices and psychosocial methods in organization compassion and leadership research. Their study shows how authentic and profound listening can lead to empathy; and through empathy, compassion. It

is through deeply felt compassion that understanding emerges and provides a potential for "moving on". Social dream drawing creates a safe, containing space for a heightened and "exquisite" empathic awareness for the exchange of areas of pain and trauma associated with colonialism and racism which otherwise would be too awful and unbearable for participants to share. The authors show how drawing on a tradition of investigating group psychodynamics—viewed from a socio-analytical or psychosocial lens—and an openness to a social or associative unconscious can provide a heretofore sparsely researched field in studies of compassion. The social dream drawing method as a process in itself is compassionate, in that judgements, solutions and answers are eschewed in favor of transparency and tolerance of all the contributions to the group process. Social dreaming has often been described as a "democratic" process; Pule and Gibney show how such a democracy in the fullness of its participatory quality can be a conductor of compassion.

Krause et al. qualitatively examine compassion within German work organizations in the context of dyads comprising leaders and their direct subordinates. Their analysis of interview data reveals paradoxes—opposing, interdependent tensions—which leaders and/or their subordinates may encounter during episodes of suffering and compassion. Their empirically grounded descriptions of several such paradoxes bring needed nuance to our understanding of challenges and opportunities associated with expressing suffering and enacting compassion in work settings. Their research also considers how social hierarchy influences the observed paradoxes, pointing to paradox navigation as a potentially crucial but under-appreciated (and under-researched) aspect of the competent practice of compassion, particularly for organizational leaders. More generally, this study's findings demonstrate the value of research that surfaces compassion recipients' and providers' experiences and that examines contextual influences impacting these experiences.

Spännäri et al. used adapted grounded theory methodology with nine focus group interviews that took place in Finland in private, public, and third sector organizations. Their study explored factors preventing and promoting innovation in organizations, asking more specifically: (i) how compassion is connected to these factors; and (ii) how compassion can boost innovation. Their analysis showed that innovation is profoundly and diversely interlinked with compassion, rather than being a single variable or practice. Existence of compassion promotes innovation, while absence/lack of compassion stifles innovation.

Of particular note is how the novel concept of *copassion*, defined as "the process of responding to the positive emotions of the other" (Pessi et al., 2022, p. 83), was found to be associated with innovation. While the term copassion is beginning to emerge into the lexicon of compassion studies, it is too early to say whether it is a potentially valuable future direction, or a wrong turn. Without further research, and conceptual and theoretical development it is too early to tell. However, the articles in this Research Topic issue provide material and methods to craft new and innovative interdisciplinary research agendas alongside more tried and tested approaches.

New horizons in neuroscience

This Research Topic issue is positioned in the Frontiers in Organizational Psychology Speciality Section, and we were initially surprised at the lack of organizational neuroscience articles received. However, a number of relevant neuroscience focused studies featured in Mongrain et al.'s (2021) recent Research Topic, and a robust foundation for exploring the neuroscience of compassion has been well established (Seppälä et al., 2017). This provides converging theoretical, empirical, environmental and neuroscientific evidence that can be applied to a range of different settings at both individual and group levels of analysis. The intra and interpersonal nature of compassion toward self and others highlights the need for flexibility at the neurobiological level, observed within the parasympathetic nervous system to regulate heart rate variability (HRV) and vagal tone (Porges, 2017). These mechanisms underpin cognitive flexibility, emotional regulation, behavioral responses and interpersonal awareness that facilitate self-monitoring, self-soothing, empathy and response selection. The close alignment with the threat, drive, soothe processes within the psychobiological model of compassion (Gilbert, 2015) can inform understanding of individual, group and organizational processes. In turn, this can improve working relationships, compassionate leadership and promote the practice of kindness. While Jayasundara et al.'s article was the only one to explicitly refer to Gilbert's psychobiological model, neuroscience is implicit—if not cited—in the other articles in the issue.

The emerging field of Organizational Cognitive Neuroscience highlights the challenges, limitations and tensions that are associated with the complex imaging methods that are required to identify specific neurotransmitters and brain regions (Senior et al., 2011; Butler et al., 2016). In the field of organization and management research there is much to be gained in future collaborations between neuroscientists and scholars. For example, as we move toward more inclusive and more innovative research horizons the potential for technological advances in Immersive Virtual Reality settings, sensors, portable non-invasive imaging techniques and more extensive hormonal testing will provide greater opportunities to investigate the organizational neuroscience of compassion (Boukarras et al., 2021). The following key questions can be used to evaluate whether an empirical research program is worthwhile: (i) does it address a core problem in organizational/management research and/or practice? (ii) does it raise compelling new questions for neuroscientists? (iii) has it been neglected in other fields and is it likely to remain neglected? and (iv) will neural evidence add to our conceptual and theoretical understanding and, if so, how? (see Butler et al., 2016, p. 556).

In conclusion, this Research Topic demonstrates how qualitative and mixed methods research using innovative and inclusive approaches can shape future research agendas. It also draws attention to the need for compassionate cultures and

leadership in universities—especially, we argue, in those that carry out research in these areas. This should further extend to all aspects of academic life and organization: compassion in the peer review processes for publication, research funding, appraisal systems, target setting, and expectations placed upon academics to produce impact at every step, even when impact is itself often hard to quantify and evidence.

Hoggett (2009) identified compassion as an essentially different quality to empathy, which he argues requires a degree of pity toward the object. The empathic process is a one-way process from subject to object and runs the danger of projecting unwanted and unnecessary thoughts and feeling into that other. Compassion, on the other hand, requires the participation of that other. Hoggett calls this “intelligent compassion whereby one can feel the pain and think critically about the injustice, thereby fusing an ethic of care to an ethic of justice” (2009, p. 147). Taken as a whole, the papers in this special edition provide foundations of a framework for a new structure of ethics formed through the fusion of care and justice, and we would like to thank the reviewers and Frontiers editorial team who have assisted us in this endeavor.

Author contributions

KW: Writing—original draft, Writing—review & editing. JM: Writing—original draft, Writing—review & editing. TE: Writing—original draft, Writing—review & editing. JK: Writing—original draft, Writing—review & editing.

Funding

The author(s) declare that no financial support was received for the research, authorship, and/or publication of this article.

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- Waddington, K., and Bonaparte, B. (eds.). (forth coming). *Developing and Supporting Pedagogies of Compassion in Higher Education: A Practice Based Approach*. Cham: Springer.



OPEN ACCESS

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SPECIALTY SECTION

This article was submitted to
Health Psychology,
a section of the journal
Frontiers in Psychology

RECEIVED 10 April 2022

ACCEPTED 29 August 2022

PUBLISHED 27 September 2022

CITATION

Halamová J, Greškovičová K, Baránková M,
Strnádelová B and Krizova K (2022) There
must be a way out: The consensual
qualitative analysis of best coping practices
during the COVID-19 pandemic.
Front. Psychol. 13:917048.
doi: 10.3389/fpsyg.2022.917048

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There must be a way out: The consensual qualitative analysis of best coping practices during the COVID-19 pandemic

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Despite the continuous efforts to understand coping processes, very little is known about the utilization of best coping strategies during the COVID-19 pandemic. In this study, we aimed to analyze the coping strategies of individuals who scored high on an adaptive coping questionnaire in order to understand the most adaptive coping strategies during the COVID-19 pandemic. We used consensual qualitative analysis in a team of four researchers and one auditor. The convenience sample from which we identified the high scorers comprised 1,683 participants (67% women, 32.35% men, and 0.65% did not report their gender) with a mean age of 31.02 years (SD=11.99) ranging between 18 and 77 years old. Based on their scoring in the COPE Inventory, nine participants were selected from the sample with the highest scores in coping skills in at least two out of its 15 subscales. In-depth repeated interviews with six participants for the main analysis were conducted, and three were added to check the data saturation. The results showed that the most adaptive coping strategies used during the COVID-19 pandemic could be categorized into four main domains: self-compassion, compassion to others, compassion from others, and mutual compassion. The most frequently mentioned and the most elaborated upon by our respondents was the domain of self-compassion. The most interesting finding was the emergence of the fourth type of compassion, labeled *mutual compassion*, which referred to deliberate attempts to take care of oneself and others while suffering together in order to elevate the suffering for both. This kind of compassion might arise in the situations of collective suffering, such as a catastrophe or a pandemic and might have the additional benefit of bringing people closer to each other in difficult times.

KEYWORDS

compassion, self-compassion, mutual compassion, consensual qualitative research, COVID-19 pandemic, coping

Introduction

The conceptual analysis of stress and coping conducted by Carver et al. (1989) argued that the stress response consisted of three processes: primary cognitive appraisal, during which one evaluates the level of threat, secondary cognitive appraisal, during which one considers their resources and the potential responses to threat, and subsequently, coping, which refers to one's

execution of a specific response that targets the threat demands. In this model, coping is understood as a major part of the stress process, and it is considered to mediate the connection between stress and psychological distress or to moderate the stress-strain relationship (Ogden, 2000).

Previous research on coping strategies can be divided into three areas: examining individual coping strategies, focusing on differing groups of coping strategies, or studying coping profiles which combine different coping strategies (Kavčič et al., 2022). The first one describes distinct basic coping strategies such as 400 strategies gathered by Skinner et al. (2003). The second one refers to the bi-division of strategies in terms of more or less opposite groups of strategies, such as emotion- or problem-focused coping, cognitive or behavioral coping, and direct or indirect coping. Previous studies demonstrated the association between groups of coping strategies and psychological health and well-being (e.g., Park and Adler, 2003). For instance, positive coping styles were found to be related to a lowered risk of anxiety and depression and to higher levels of adjustments in the face of stressful events (e.g., Andrews et al., 1978; Zong et al., 2010; Zhen and Zhou, 2016). The distinction between engagement (aiming at dealing with the stressor, strategies such as problem-solving, planning, acceptance, positive reappraisal) versus disengagement coping (aiming at escaping from the stress, strategies such as denial, withdrawal, avoidance) seems to be the most valuable in terms of physical and mental health (Götmann and Bechtoldt, 2021).

The third area of coping research—combinations of coping strategies—focuses on unique sets of coping strategies referred as coping profiles. People with specific profiles maximize certain coping strategies while minimizing others (Doron et al., 2015). For instance, three profiles evolved from using quantitative measure the COPE or the Brief-COPE Inventories (Carver et al., 1989): a profile with approach-oriented strategies, a profile with avoidance strategies, and a profile with limited strategies (Kavčič et al., 2022). Different profiles might have a differing impact on mental health outcomes. For instance, the profile extensively focused on problem- and emotion-focused coping combined with moderate support seeking and low avoidance coping strategies was found to be associated with lower psychological distress (Eisenbarth, 2012). An identification of distinct coping profiles therefore could be beneficial for both prevention of distress as well as intervention during stressful times (Doron et al., 2015).

Previous research on pandemic coping in general population

Stress-strain relationships have been investigated by exploring coping strategies in different samples during the COVID-19 pandemic. For example, many previous investigations focus on frontline workers, such as healthcare professionals, nurses, and critical care physicians (e.g., Banerjee et al., 2021) or on vulnerable populations, such as unemployed people (Ogueji et al., 2021a), people with multiple disabilities (Mathias et al., 2020; Galica et al.,

2021), or people with mental diagnosis (e.g., Burton et al., 2021). Limited research also focused on general population, for example college students and young adults (Branquinho et al., 2020; August and Dapkewicz, 2021; Vuletić et al., 2021), adults (Lelek-Kratiuk and Szczygieł, 2021; Ogueji et al., 2021b), older adults (e.g., Farhang et al., 2021; Finlay et al., 2021; Greenwood-Hickman et al., 2021; Gonçalves et al., 2022), and families (Salin Voronin et al., 2020).

Several recent studies applied quantitative approach to map coping strategies and their associations with mental health outcomes in general adult populations. Pandey et al. (2022) found that emotional resilience, optimism, and social support were negatively related to negative emotions experienced during the pandemic. Avoidance was found to be effective in minimizing negative emotions, but only for a short time. The mentioned coping strategies were important in returning to normalcy, with an exception of optimism which was found to be important for controlling emotions. The authors suggested there is a difference between escaping strategies and relieving strategies with both leading to different emotional outcomes. Another study highlighted cognitive appraisal and behavioral strategies in adults as essential management tools of psychological distress since they were found to be connected with stable well-being over time (Kim et al., 2022).

Based on the profile approach research, Kavčič et al. (2022) reported three profiles in pandemic coping. An engaged profile encompassed active coping, planning, acceptance, and positive reframing. A disengaged profile referred to low problem-focused coping, social support, acceptance, and positive reframing, and an avoidant profile overused substance use, self-blame, and humor. People with an engaged coping profile scored highest on well-being and lowest on ill-being variables (Kavčič et al., 2022).

Several previous studies utilized qualitative analysis to understand coping during the pandemic. August and Dapkewicz (2021) aimed to understand meaning-focused coping in college students. The most common strategy among college students was found to be *Benefit finding* evidenced by themes such as learning to be grateful, personal growth, and clarity about the future. Additionally, several societal benefits were identified by this study, such as selflessness is widespread, the world has an opportunity to learn what matters, creative solutions and teamwork can help, improvements to the natural environment. In addition to benefit finding, *Negative emotional reactions* strategy manifested in fear, anxiety, and stress, dislike for online learning, and boredom. On the other hand, a theme of hope was found to be part of *Positive emotional reactions*. Comparably, a study by Branquinho et al. (2020) showed that adolescents and young adults were found to cope with the pandemic by having a *regular communication with family and friends via video calls, carrying out pleasurable activities, leading life calmly and positively, and having a routine and scheduled times*.

In general adult population, Vuletić et al. (2021) identified several main themes regarding the pandemic: *disruptions in everyday life and functioning, the pandemic as a health crisis, public reaction to the pandemic as a source of tension and frustration, crisis as an opportunity and imagining the post-pandemic future*. Efficient coping strategies that emerged were *focusing on the positive, rational*

evaluation of the situation and following the preventive measures, proactive approach, and self-organization, and seeking support. On the other hand, inefficient coping strategies were somatization, passivation, and denial and avoidance. Similarly, Lelek-Kratiuk and Szczygieł (2021) find out that adults generally perceived the pandemic and pandemic-related lockdown as moderate stressors. Stress coping strategies were found to change as a result of increased stress, and in this situation, avoidance was presented as the most adaptive reaction. Strategy of acceptance was more present in situation of COVID outbreak in comparison with another stressful situation. In addition, Ogueji et al. (2021b) studied coping strategies of adults and identified 11 themes: *socializing with loved ones (online)*, *engaging in exercise*, *being occupied with jobs*, *being occupied with studies*, *avoiding negative news on COVID-19*, *consumption of alcohol*, *healthy eating*, *engaging in meditation activities*, *gaming activities*, *hope*, *self-care*, and *self-appreciation*.

Few studies analyzed coping strategies of an older adults. Themes of *belief*, *faith and hope*, *family*, *information/following recommendations* were identified in a sample of elderly people studied by Gonçalves et al. (2022). One of the emerged themes in the study by Farhang et al. (2021) was coping with social isolation/response to difficulties during the pandemics in elderly diagnosed with multiple cognitive impairment. Older participants were found to cope by *virtual connection with friends and family*, *engaging in community groups and activities*, *positive attitude*, *perspective gained from past hardships* (Greenwood-Hickman et al., 2021), but also by *exercise and outdoor* and *daily life activities* (e.g., hobbies, keeping a routine, or reading; Finlay et al., 2021). However, a theme of *nothing* emerged as well, which described participants who reported their inability to cope with stress.

The aim of the current study

Despite the continuous efforts to understand coping processes and strategies of various populations, very little is known about the utilization of best coping practices during the COVID-19 pandemic. Therefore, in this study, we aim to map and analyze coping strategies of the best copers – the individuals who scored high in adaptive coping on a coping questionnaire (the COPE Inventory; Carver et al., 1989). We posed the following research question:

How do the individuals, scoring high in coping, cope with the COVID-19 pandemic?

Materials and methods

Measurement instrument

The COPE inventory

The COPE Inventory was created by Carver et al. (1989) based on theoretical assumptions about functional coping. The COPE comprises of 60 items and 15 subscales: 1. Acceptance, 2. Active coping, 3. Behavioral disengagement, 4. Denial, 5. Seeking emotional

support, 6. Seeking instrumental support, 7. Mental disengagement/Self-distraction, 8. Planning, 9. Positive reinterpretation, 10. Religion, 11. Restraint, 12. Substance use, 13. Suppression of competing activities, 14. Venting, and 15. Humor. The COPE is the most frequently used instrument for measuring of coping behavior (e.g., Voronin et al., 2020) and showed to have good psychometric properties and adequate factor structure in Slovak population (Halamová et al., 2022).

Research team

Our research team consisted of four postdoctoral researchers in the field of psychology who represented the core coding team and one full professor of psychology who served in the role of the auditor. The professor and two of the core team have been doing research in the field of compassion while the other two members of core team have had experience in coping research.

Research sample

The convenience sample, gathered online through social media, comprised of 1,683 participants (67% women, 32.35% men, and 0.65% did not report their gender) with mean age of 31.02 years (SD=11.99). Participants' ages ranged from 18 to 77 years. All respondents had Slovak nationality and signed an informed consent. After consenting, the participants completed an online questionnaire containing sociodemographic questions and the COPE Inventory (Carver et al., 1989) questions. Since we were interested in the best coping strategies during the pandemic, we randomly chose seven participants from the sample of individuals who had the highest scores on all 15 subscales of the COPE Inventory (Carver et al., 1989). We used the cut-off score of ten points because the maximum score for each the COPE subscale was 14 points. Our selected seven participants had a score higher than 10 points in six, five, four or three subscales of the COPE (Carver et al., 1989). The seventh participant was randomly selected to ensure data saturation after the finalization of consensual qualitative analysis. The high-scoring participants were: a 20-year-old female and a 24-year-old female university students, a 23-year-old female with a secondary education, and a 27-year-old female, a 36-year-old female, a 38-year-old woman and a 46-year-old female with a university education. Since all seven participants were women, we also wanted to check if the categorization were saturated among male participants as well. Therefore, we decided to add two randomly selected male participants who scored highest in the COPE Inventory (more than ten in two subscales). The participants were: a 21-year-old male university student and a 29-year-old male with a university degree. High scoring participants were invited for in-depth interviews. To motivate participants, we offered a 50-euro voucher for the completion of the interview. Data were collected in accordance with the ethical standards of the institutional and/or national research committee and in accordance with the 1964

Helsinki Declaration and its later amendments or comparable ethical standards. The study's protocol was approved by the Ethical committee of Faculty of Social and Economic Sciences at Comenius University in Bratislava.

In-depth interviews

We conducted two in-depth interviews with each participant within a two-week timeframe. The interviews with each participant lasted about 180 min. The semi-structured interviews with open-ended questions were focused on the participants' coping during the COVID-19 pandemic. The interview protocol consisted of the following areas: the participant's evaluation of their pandemic functioning, recalling of any experienced pleasant situations and the participant's strategies to savor them, recalling any experienced unpleasant situations during the pandemic and coping strategies that the participant used to deal with them, and the pandemic's perceived effect on the participant's lives. The interviews were transcribed verbatim. We used ATLAS.ti⁹ for coding and the analysis.

Data analysis: Consensual qualitative research

First, all researchers reflected in writing on their expectations about the participants' coping during the pandemic to minimize the biases. Second, the transcribed interviews were analyzed using the Consensual Qualitative Research method (CQR, Hill et al., 1997). This method was primarily developed to investigate inner experiences of complex and rare phenomena that were difficult to capture using the traditional quantitative paradigm. An important feature of this method is that it allows a clear, vivid, and dense description of the phenomenon. This method requires to work in a team. In our case, we had four researchers in the main team and one independent auditor for feedback and control of data analysis. The team approach is used to ensure a diversity of perspectives and thus a greater convergence with the "truth" and a minimization of the researchers' bias. The CQR approach (Hill et al., 1997) emphasizes the fact that participants are experts in their own experiences and that researchers are the "ones who learn from the participants about the phenomenon. A qualitative approach seemed to be a very appropriate approach for this stage of the study, as it allows the study of inner experience of coping with the pandemic COVID-19 without predetermining the answers of the respondents.

Following the CQR method (adapted from Hill et al., 1997), our research team first identified domains in each of the participants' narratives. Then, we discussed the domains and reached a consensual solution. The domains were then checked across multiple cases. The research team then constructed subdomains, categories, and subcategories within individual cases and conducted a cross-case analysis. The auditor reviewed the

analyzed domains, subdomains, categories, and subcategories of cross-cases, suggested revisions, and discussed with the team. The analysis was done for six cases and then we added one more case to check data stability and then two more male cases to check gender stability of the data. Since added cases showed the analysis to be stable, we finally created a general story of coping with the pandemic within all cases. Following the CQR (Hill et al., 1997), we considered categories which were saturated by all nine participants as general categories, and categories which were mentioned by more than the half (at least by five) participants were called typical. In the final step of our analysis, we received feedback from research participants about the results.

Results

This study analyzed the coping strategies of participants who scored high on the COPE Inventory in Slovakia during the COVID-19 pandemic. Based on the CQR analysis of nine in-depth repeated interviews, there were 2,477 coded quotations total in 262 unique codes gathered into four domains, 15 subdomains, 36 categories, and 111 subcategories. The most frequent domain was the domain of Self-compassion with 1,896 coded quotations (76.50%), followed by Mutual compassion with 266 coded quotations (10.74%), Compassion to others with 202 coded quotations (8.16%), and Compassion from others with 114 coded quotations (4.60%). We labeled the domains as compassion because they all referred to elevating suffering and distress, even though they differed in the object and the subject of compassion. However, all domains were based on general compassionate competencies derived from both the evolutionary motivational and competencies approach to compassion (Gilbert et al., 2017) and the Strauss et al. (2016) model of compassion incorporating emotions, cognitions, motivations, and behaviors to relieve suffering. Each domain was structured into four subdomains (with an exception of Compassion from others that lacked motivation since we could not assume the motivation of other people to help our participants): thoughts, emotions, motivation, and behavior that participants mentioned in relation to their coping during the pandemic.

Domain Compassion from others

The domain Compassion from others referred to unsolicited or requested compassion that family, friends, and acquaintances directed towards the participants in various pandemic situations and that the participants recognized as manifestations of compassion. Three subdomains informed this domain: Positive emotions evoked by others; Caring understanding from others; and Caring behaviours by others. In contrast to the other domains, there was no subdomain related to Motivation because the source of compassion was another person, and the participants did not report on other people's motivation. Please see Table 1 for categorization of the domain with illustrative examples.

1 <http://atlasti.com>

TABLE 1 Categorization of the domain Compassion from others.

Compassion from others				
Subdomains	Categories	Subcategories	Examples	
Positive emotions evoked by others	Joy evoked by others	Experiencing joy evoked by others interest	<i>".. When someone sent me a nice text message, I was so pleased."</i>	
		Enjoying the presence of one's own child	<i>"My little one is such a joy. It's like the fact that just looking at that kid and the person's so happy to have him."</i>	
	Pride evoked by others	Trust evoked by others		<i>"(her colleagues sent her flowers because she was sick). It was a surprise, so unexpected, ... it was a feeling that I guess what I am doing, I am doing well."</i>
				<i>"Certainly some confidence in the doctor who did the surgery. I mean, I was able to get more information about who he is, what he does. I was able to have conversations with him, get to know him as a person."</i>
	Surprise evoked by others	Gratefulness evoked by others		<i>"But it was definitely such a surprise. So unexpected."</i>
				<i>".. I have goosebumps as I am saying it but our relationships at work are very close. It's really like these people care about each other and they thought of me. That was such a wow effect for me."</i>
Satisfaction evoked by others	Understanding from others	Understanding from others	<i>"Because my sister and I have a very good relationship, I knew that if I had a problem with my father, my mother, that I could just talk to her. That no friend will understand me as much as my sister."</i>	
		Asking others for support	<i>".. that I'm going to reach out to people, I'm not afraid to ask for help, I'm just looking for help, I'm just looking for ways to do it, so I can still get something out of it."</i>	
Caring behaviours by others	Specific care from others	Health care from others	<i>"I have excellent doctors, a lung doctor and an immunologist. Both called me every day to check on me and to adjust the treatment. I know people at the pharmacy and prepared the medication for me."</i>	
		Cleaning from others	<i>"They all came to me to help with cleaning."</i>	
		Cooking from others	<i>"My mom has a lot of friends and family members, they would come and bring food, and other things they thought she needed. Those are such, at least for us, pleasant moments."</i>	
		Purchases from others	<i>"He had already gone shopping for us, he left it for us at the door and all"</i>	
		Gifts	<i>"I was at home after recovering from COVID and they sent me a big bouquet big."</i>	
		General care from others	Care from others	<i>"I was able to see who my real friends are, people who texted me to see if I was ok, to check how I felt, whether I needed something."</i>
			Initiate a contact with others	<i>"My other brother started calling occasionally and he would never call before."</i>
	Support from others	<i>"Fortunately, I had documentation from the hospital, and the teacher helped me to complete a request for an extension of the exam period that I needed to submit to the dean. Well, if it wasn't for her, I probably would not have finished the semester."</i>		

Two main subcategories emerged from the subdomain Caring understanding from others: Understanding from others which was given freely by other people to our participants and Asking others for support when the participants asked for understanding from other people. In the subdomain Positive emotions evoked by others, six categories about specific positive emotions arose as consequence of other people's actions towards the participants: Joy, Pride, Trust, Surprise, Gratefulness, and Satisfaction, all evoked by others. The subdomain, Caring behaviours by others, consisted of all statements related to acts of caring from other people towards the participants. The caring behaviors were further divided into two categories: Specific care from others which was related to health care received from

others, tidying up, shopping, cooking, gift giving all provided by other people to the participants, and General care from others linked to unspecified caring behaviours from others, such as initiating contact or providing unspecified support to the participants.

Domain Compassion to others

The second largest domain, Compassion to others, referred to compassion that participants consciously, intentionally, and voluntary directed toward other people in their social network. This domain reflected one-directional manifestation of

participants' compassion toward others which outweighed their own needs and desires and expectations of help in return.

Subdomain Caring thoughts about other people's suffering was defined as any thoughts that a person had related to their understanding of another's difficulties. This was represented by one category, Empathy towards others. This category encompassed any empathetic thoughts communicated by the participants when they were imagining the hardships experienced by other people in their lives. Participants often expressed empathetic thoughts when discussing limited or lost opportunities that others experienced due to the pandemic.

Subdomain Caring emotions towards others referred to felt emotions experienced as a result of focusing on difficulties of someone else. Two categories were identified in this subdomain: captured feelings of worry and fear that participants expressed about their loved ones (Worrying about others) and feelings of compassion toward others going through a difficult time (Compassion toward others). The situations that triggered the participants' compassionate and worrying feelings were usually related to a loved one's physical and mental health, loved ones' needs, their home environment, their conflicts with other people, as well as the negative impacts of their loved ones' being potentially manipulated and believing in conspiracy theories.

We defined subdomain Motivation to care for others as a conscious decision to orient oneself toward another person's well-being, for example by being there for others, by providing help to others when needed, and by paying attention to others. This subdomain consisted of four categories: Motivation to help other people, Self-sacrifice to maintain relationships, Acknowledgment of others, and Working toward getting along with others. The first category, Motivation to help other people, described the participants' intentional decision to care for others and help them. Participants explained how they focused on other people's well-being for example by making sure that their loved ones and friends had a good time and how they were willing to go an extra mile for their family members. The second category, Self-sacrifice to maintain relationships, captured thoughts and behaviours that go against one's best interest but that one nevertheless engages in so as to keep a relationship with others. For example, the participants described intentionally interpreting tense situations with others as their fault or keeping secrets from others in order to maintain peace in their family. The third category, Acknowledgment of others, referred to participants showing thanks or appreciation towards others, whether by small deeds of caring or by talking about other people in an appreciative and thankful manner. The last category in this subdomain, Working towards getting along with others, captured the deliberate efforts which participants made to maintain good relationships with other people. The efforts fell into two subcategories, Tolerating others and Respecting other people's individuality. Participants described how they consciously decided to figure out how to get along with others and how to be open-minded and accepting of other's choices.

The last subdomain in the Compassion to others domain was Caring behaviours towards others. We defined this subdomain as

conscious and intentional actions aimed at providing tangible and concrete care to other people or just encouraging them. The participants described specific behaviours that they pursued in order to meet the needs and wants of their loved ones or other people. For example, participants describing grocery shopping for others, purchasing medicine, and communicating with healthcare providers, volunteering, sharing information, providing childcare and pet care, gift-giving, making phone calls on behalf of others, and sharing jokes to cheer others up. All analysis related to Compassion to others is described with specific citations of participants in [Table 2](#).

Domain Mutual compassion

The domain Mutual compassion contained bilateral and reciprocal compassionate manifestations between the participants and other people. We can define the mutual compassion as win-win situation since both sides gained from these manifestations. The subdomain Mutual understanding referred to mutual exchange of thoughts captured by category Sharing with others. The subdomain Mutual compassionate emotions referred to the participants' experienced emotional resonance between themselves and other people when they felt close to others or when they reached to others in order to experience closeness. Mutual compassionate emotions were saturated by a specific emotion of mutual happiness, categorized as Shared joy. In the subdomain Mutual compassionate motivation, the participants commented on their striving for living up to their values in their mutual personal and work relationships. Participants described their Pursuit of equal relationship by striving for balance in giving and receiving and also their Belief in good intentions described by the hope that generally, when people act, they do it with the best intentions. The subdomain Mutual compassionate Behavior included a category Seeking out Interactions with people that reflected participants' efforts to proactively form new relationships and to communicate with others. The subcategory Organizing meetings further reflected the participants' effort to meet more people and enjoy their presence even in limited pandemic conditions. The second category, Shared activities, captured respondents' spending time with others by simply being with them or doing activities with them, or engaging in mutual help, for example around household. Participants' illustrative quotes and the categorization for Mutual compassion can be found in [Table 3](#).

Domain Self-compassion

Self-compassion referred to any manifestations of compassion that was related to participants themselves. All analysis related to Self-compassion is described with specific quotations of participants in [Table 4](#).

TABLE 2 Categorization of the domain Compassion to others.

Compassion to others			
Subdomains	Categories	Subcategories	Examples
Caring thoughts about other people's suffering	Empathy towards others	Expressing empathy toward others	"There are people who do not have this opportunity and it must be very hard for them."
Caring emotions towards others	Worrying about others	Experiencing worry about others	"I did not get any rest. My husband [sick with COVID] had trouble breathing. At night, through the closed door, I was listening to him sleeping, and I was happy when I heard his snoring. Snoring meant he was breathing normally."
	Compassion towards others	Experiencing compassion towards others	"I'm not happy that people have more problems, but I'm glad that maybe that's how I'm going to say it, that people have become more aware of their problems and have started to say they want to solve them."
Motivation to care for others	Motivation to help other People	Motivation to care for others' well-being	"I wanted everyone to enjoy it, and I did everything that was in my power, so no one felt bored or lonely."
		Willingness to help others	"I was very involved [in helping my sister] because I wanted her to have everything she wished for."
	Self-sacrifice to maintain relationships	Self-attribution of responsibility for unpleasant situations	"I rather think that I did something wrong and [that's why] the other person reacted the way they did."
		Keeping secrets from others	"It was unpleasant because I got the vaccine, but I could not tell my parents."
	Acknowledgment of others	Expressing thanks to others	"I sent her a message to work expressing my thanks."
		Expressing appreciation of others	"My mom always knew how to go about cooking. How much to make, for how long, all that. When I started cooking, I was wondering how she does it? How is it even possible?"
	Working towards getting along with others	Tolerating others	"In our household, we had to learn to get along with each other. There were tense moments but in that year and a half, we had to figure it out and I thought it was possible [despite the tensions]."
		Respecting other people's individuality	"I allowed other people to find their own way."
Caring behaviors towards others	Supporting others	Tangibly supporting others	"I was going grocery shopping for her so she did not need to go to public places."
		Encouraging others	".. I encourage others.."

Self-caring thoughts

Subdomain Self-caring thoughts referred to any kind of rational and mental activity which was aimed to elevate one's own distress or suffering. In category Defense mechanisms, participants commented on their various ways how to protect themselves from inner conflicts or outer conflicts. The participants used Compartmentalization to keep some thoughts isolated from each other which could together be conflictual. Defense mechanisms also included Denial as the person's choice to reject reality in order to avoid an unpleasant truth of pandemic or even Suppression of pandemic situation by conscious effort to put disturbing thoughts out of mind, or to control and inhibit these disturbing thoughts and feelings. Participants also spoke directly about the process of giving the logical reasons to justify particular behavior in their minds called Rationalization and about the experience of being mentally away from pandemic, to make a pause in thinking about COVID-related issues and simply to switch off to another mental activity by the mechanism of Psychological detachment in form of mental disengagement

or overeating or substance use. Acceptance was another category of Self-caring thoughts represented by tolerance of negative pandemic experiences without trying to change them. Participants accepted either the pandemic situation which is visible in Acceptance of situations or their inner experiences or characteristics which is distinctive for Acceptance of self. The third subcategory of Acceptance was typical by tolerating weaknesses and complications in Acceptance of adjustment difficulties. Planning was also involved in the Self-caring thoughts and included all thoughts related to designing change and better life for the participants. One of the subcategories of Planning was Preparation consisting of all participants' statements related to information retrieval about the virus and pandemic or even about the current rules, assessing risks, problem analysis etc. Planning solutions was the cognitive active process of setting the specific ways how to manage the situation successfully by for example designing solutions, planning days, events, or the whole life. Utterances referring to the exact and final decision on how to deal with the specific problem were

TABLE 3 Categorization of the domain Mutual compassion.

Mutual compassion			
Subdomains	Categories	Subcategories	Examples
Mutual understanding	Sharing with others		"We called and texted each other a lot, we also sent pictures to each other."
Mutual compassionate emotions	Closeness with others	Experiencing of closeness	"When I come to her and confide in her, we laugh together, we cry together, we are simply on the same wavelength."
		Reaching for closeness	"We had to solve some existential problems recently, that really brought us close to each other."
	Shared joy		"I'm very happy because one of them is pregnant. I am very much part of the pregnancy experience. We are all forward to the baby together and we are going through it together."
Mutual compassionate motivation	Being motivated by values	Pursuit of equal relations	"Since they were worried about me, took interest in me, asked me how I was going and if I needed anything. I wanted to repay the favor. So, I was trying to help them too, I did not know how but at least I was looking for information for them. It was important to me to balance the relationship this way."
		Believing in good intentions	"I believe that we are a close family and we want the best for each other, and that he had a good intention. He did the best he could in the moment."
Mutual compassionate behavior	Seeking out interactions with people	Initiate a contact	"The restaurants opened for the first time. I went with my friends. I initiated us going right away and they agreed."
		Find new contacts	"I found a new friend in my class, we were writing to each other during a lecture."
		Organizing a meeting	"I called two, three friends, and we organized a mini birthday party."
	Shared activities	Being with others	"We were spending that time very intensively together."
		Doing with others	"We do things we are able to with a child at home. Or we go outside and explore the nature with our little one."
		Mutual help	"We spent that time (with my husband) more intensively together. We also took turns taking care of our daughter."

labelled Making decisions. Encouraging thoughts was the most branched category. It involved the use of fun in dealing with the pandemic in subcategory Humor. Subcategory Empowerment was linked to perceiving oneself as strong and resourceful person with options to decide about. Some respondents stated that the pandemic was not the most difficult situation in their lives and therefore they had ability of Boosting by overcome difficulties by remembering already solved and overcome hardship in their previous lives or Boosting by positive things which means that participants reminded themselves positive sides of a difficult situation. Encouraging thoughts were also seen in the of Comparing to disadvantaged by balancing that now it is not as bad as used to be or as someone else is experiencing something worse than me. In the last subcategory of Self-caring thoughts called Changing worldview, there were involved statements related to reassessing past based on the pandemic experiences and transforming their views accordingly.

Emotions towards self

The subdomain Emotions towards self encompasses either emotions that were recognized, expressed, or handled with regard to pandemic situations regardless of their positive/negative charge (whether it was connected to pleasant or unpleasant situations). First category which arose in this subdomain was Mindfulness of emotions referring to capacity to notice one's own emotions, to be receptive to own experience here and now and enjoy being

present as well as ability to switch on or off own emotions. The category of Negative emotions towards self consisted of all utterances from participants linked to unpleasant feelings towards self and the qualitative analysis yielded 14 separate subcategories of it: Processing negative emotions referred to ways how to handle negative emotions generally and then there were 13 specific negative feelings such as Crying, Helplessness, Disappointment, Boredom, Disgust, Dissatisfaction, Loneliness, Despair, Tiredness, Anger, Fear, Frustration, and Sadness. The category of Positive emotions towards self consisted of any kind of positive emotion experiencing towards self and composed of 10 separate subcategories: Savoring related to deliberate enjoying pleasant emotions towards self in one's life, and specific pleasant emotions such as Joy, Contentment, Gratitude, Self-compassion, Fun, Pride, Hope, Awe, and Self-love.

Motivation to self-care

The subdomain Motivation to self-care is defined as motivational strategies used by people in order to encourage themselves to engage in self-care activities. Categories Self-motivation and Awareness of one's needs emerged in this subdomain. In the Self-motivation category, participants described engaging in an internal dialog and self-talk to motivate themselves to act. Motivation strategies were often based on positive encouragement, for example *via* a reward or positive self-talk, but also sometimes on "tough love," such as when a participant

TABLE 4 Categorization of the domain self-compassion.

Self-compassion				
Subdomains	Categories	Subcategories	Examples	
Self-caring thoughts	Defense mechanisms	Compartmentalization	<i>"In my mind, I lock it in. I separate it. And if I need to, I'll let it go."</i>	
		Denial	<i>"I pushed it out of my mind."</i>	
		Suppression	<i>"If it does not concern me (referring to COVID), I do not need to pay immediate attention to it."</i>	
		Rationalization	<i>"I'm trying to rationalize."</i>	
	Acceptance	Psychological detachment	<i>"I'm trying to focus on something else."</i>	
		Acceptance of situations	<i>"We have gotten used to some things, since it's basically been going on for a year."</i>	
		Acceptance of self	<i>"I'll admit that this is a weakness of mine. I accept that I have this weakness."</i>	
		Acceptance of adjustment difficulties	<i>"It was hard for me to accept. I have not apologized so many times in my life before, did not have to make things right as many times as I did during this period (referring to the pandemic)."</i>	
	Planning	Preparation	<i>"We were reading medical information about corona we could find."</i>	
		Planning solutions	<i>"I turned to a lawyer, looking for help."</i>	
		Making decisions	<i>"I've made my decision and I want to follow through on it. I want to move on, I do not want to live like this anymore. I'm going to change my life."</i>	
	Encouraging thoughts	Humor	<i>"for this corona times, it is already an amazing number of people we can invite. We can have a party with six or seven people, haha!"</i>	
		Empowerment	<i>"I encourage myself that I can do it."</i>	
		Boosting by overcoming difficulties	<i>"For how much we have had to manage in the recent years, this pandemic certainly wasn't the worst."</i>	
Boosting by positive things		<i>"I realized during the pandemic that it is possible to live very modestly and be quite happy. This was such a radical change for me, that I save more in terms of finances and I am more satisfied with what I have at home, making coffee at home, making breakfast, lunch, dinner at home. If you are at work all day, when you come home you do not want to cook anymore."</i>		
Comparing to disadvantaged		<i>"A lot of people cannot stand it, but I do not mind."</i>		
Changing worldview		<i>"I found that maybe happiness is also easy."</i>		
Emotions towards self	Mindfulness of emotions	Mindfulness	<i>"I was aware in that moment, I have a fever, so I am just living in the moment"</i>	
		Mindfulness satisfaction	<i>"I think I'm a very happy person right now and I think it's like the pandemic has given me a lot of good."</i>	
		Not mindful of emotions	<i>"I am able to turn off my emotions."</i>	
	Negative emotions towards self	Processing negative emotions	Processing negative emotions	<i>"I'm going to pay attention to all the bad emotions first."</i>
			Crying	<i>"I am going to let it all out, from the depth of my being."</i>
			Helplessness	<i>"I fall apart. I have no energy, I cannot do anything."</i>
			Disappointment	<i>".. that's the disappointment stemming from the system.."</i>
			Boredom	<i>"Most of all, I feel bored.."</i>
			Disgust	<i>"I really hate all the restrictions."</i>
			Dissatisfaction	<i>"I was terribly dissatisfied for a while and I did not know why."</i>
			Loneliness	<i>"There was a strong feeling of isolation."</i>
			Despair	<i>".. and then such despair that I have an awful lot of different immunological problems.. that to make it somehow."</i>
			Tiredness	<i>"I'm already overloaded with it and I'm not in control."</i>
			Anger	<i>"I'm angry with those things that are happening and that have happened."</i>
Fear	<i>".. dying in hospital is probably one of the worst deaths I could imagine.. that fear.."</i>			
Sadness	<i>".. I was sad about it.."</i>			
Positive emotions towards self	Savoring	<i>"I'm going to indulge in different things.. I indulge in food, or I do not know.. I'm going to meet someone good."</i>		

(Continued)

TABLE 4 (Continued)

Self-compassion			
Subdomains	Categories	Subcategories	Examples
		Joy	<i>"I could see how much I have gone through and I'm looking forward to it."</i>
		Contentment	<i>".. and now I'm going to close the computer and stay in my pyjamas, and I'm going to cook or exercise or read or something. I quite like that it's like that, I'm fine."</i>
		Gratitude	<i>"Gratitude for the things we have."</i>
		Self-compassion	<i>"I did not blame myself at all, that was the last thing on my mind."</i>
		Fun	<i>"I get energy from joy and laughter."</i>
		Pride	<i>"Now I have learned how to bake and I had no idea I could do it before."</i>
		Self-love	<i>".. I just love myself so much."</i>
		Hope	<i>"I also have the hope that maybe something good will happen after all."</i>
		Awe	<i>"With such humility, I accept that it actually worked out somehow."</i>
		Motivation to self-care	Self-motivation
Self-motivation to health and fitness	<i>"I needed to fight myself to go for a walk, even if the weather was bad, otherwise I would have not gone."</i>		
Awareness of one's needs	Knowing one's needs		<i>"I became aware of my need for deep connections with other people."</i>
	Financial needs		<i>"I want to focus now on how to get more financial assets, so I do not have to worry if I have enough spending money."</i>
	Social needs		<i>"I need to be around other people, we do not have to be friends, but just being surrounded by others, feeling part of something."</i>
	Need for stability and safety		<i>"she was in the hospital, they did all the examinations for me because my head hurts incredibly.. I wanted to go home explicitly, that I was afraid to stay in the hospital, so I signed the Revers."</i>
	Need for activity		<i>"I needed to move, go for a walk, into the nature, to balance out my tense mental state."</i>
	Need for relaxation		<i>"[After work] I just needed to ... observe my surroundings."</i>
	Work-life balance needs		<i>"I was staying at work longer and longer because there was nothing to do outside of work, and I recognized it was not good for me."</i>
	Need for self-realization		<i>"[Pandemic] allowed me to find time for myself... to do what I want to do and not what I have to do. I would like to keep that."</i>
Self-caring behavior	Self-caring activities	Management of activities	<i>"What actually helps a lot is to be active. Stay active, do things."</i>
		Leisure activities	<i>"I did not have much time to read before, so now actually, but this year I'm reading my sixth or seventh book."</i>
	Religion	Online religious service	<i>"I can watch a mass online any day."</i>
		Community prayer	<i>"I talked about in my church group, there are six other girls there with me. We prayed for it."</i>
		Coping via faith	<i>"I have faith in God, in some greater existence. It actually helps me to be calmer, to take things with more humility."</i>
	Active problem solving	Relationship with God	<i>"Dear God, you must save me again. Then he always saves me again."</i>
		Adaptation to the situation	<i>"Wearing the masks and using the hand sanitizers was the least we could do."</i>
		Solving partnership issues	<i>"The dysfunctional relationship escalated after the summer, while he was staying with me. Then I told him to find another place."</i>
		Solving work issues	<i>"...(positive impact) at a time of online learning, my growth in technology. Such a new experience and the opportunity to work with children and find ways for them to get involved."</i>

(Continued)

TABLE 4 (Continued)

Self-compassion			
Subdomains	Categories	Subcategories	Examples
		Solving health issues	<i>"I've been exercising my back all year because I gave me trouble before. Now I was able to focus on physical therapy and it has gotten a little better."</i>
	Setting boundaries	Setting boundaries towards people	<i>"How else to deal with it, but only in this way. We solved it by meeting only those people who we trusted would protect us with their responsible behavior."</i>
		Setting boundaries towards rules	<i>"I have this principle that I only respect the restrictions as long as they make sense to me. If a rule does not make sense to me, I'm going to break it."</i>

described "fighting themselves" in order to go out for a walk. Participants used self-motivating strategies to work towards mental growth and towards health and fitness. The second category, the Awareness of one's needs, referred to both the participants' ability to be mindful to their needs as well as their ability to recognize their needs in various situations and to fulfil these needs. Participants' responses were also included in this category if they described how they planned on pursuing the fulfilment of their needs. Among the most commonly described needs were Social needs and the Need for activity. Participants also described the Need for life-work balance, and the need for relaxation, financial needs and need for stability and safety. Finally, three unique needs emerged related to the pandemic life's restrictions: the Need for self-realization, the Need for savoring the moment, and the Need for normal pre-pandemic life.

Self-caring behaviour

We defined subdomain Self-caring behavior as conscious, intentional, purposeful and goal directed actions to take care of one's needs in order to either solve problematic situation that one faces as such or minimize effects of stressful situation on oneself. We identified four categories in this subdomain: Self-caring activities, Religion, Active problem solving, and Setting boundaries. The first category Self-caring activities encompassed all Leisure activities and their management (Management of activities). These activities are deliberately chosen to meet one's needs (such as for physical activity) to diminish the level of stress and positively charged the individuals. They were not carried out to solve the stressful situations. However, they contributed to managing stressful situation as an extra source of happiness, joy, positive emotions, and balanced the negative effect of stressful situations. Participants mentioned a variety of leisure activities such as hobbies, jogging, reading, drawing, sewing, gardening, watching online TVs/apps, studying, listening to music and so on. When describing how they organized their leisure time or handled leisure activities they mentioned picking up a new hobby, changing hobbies, keeping the activities they had been doing, but also that they possessed less/more time for these activities.

Religion category referred to behavior related to religion. Religiously active participants followed principles of religion, its practices, and observances, and they were pondered in developing

their religious life as a personal asset. Religious active life helped participants to reduce their stress levels and to feel extra support in challenging situations. We identified four subcategories here: Online religious services, Community prayer, Coping *via* faith, and Relationship with God. The first one referred to attending religious services, the second one to praying in the group of religious people. Coping *via* faith describes faith as a personal source of strength and encouragement to overcome obstacles. Lastly, participants explicitly mentioned God and their relationship with him/her as a specific source of coping strategy. They could talk to, turn to, rely on, have faith in, and ask God for help. They also felt grateful to God and experienced their relationship to be deepening.

Third category labelled Active problem solving was defined as any kind of deliberate behavior aiming to handling or solving the stressful situation. We identified three areas of problems participants were dealing with. They were actively engaged in Solving partnership issues, Solving health issues, and Solving work issues. Moreover, in some cases, participants' solution was Adaptation to the situation because they did not only accept the situation but also changed or modified their behavior to suit the occurring situation.

The last category in Self-caring behavior was named Setting boundaries because it reflected tendencies of participants to define their limits, define themselves against other people or rules and to keep their integrity. Setting boundaries towards people involves conscious sorting out people that participants wanted to meet or be in touch with, declining in meeting people, changing the way they were meeting with others, standing up for themselves. On the other hand, Setting boundaries towards measure/rules referred to judging the rules and participants willingness to follow or consciously break some of them based on their own evaluation of them and decision how much to follow them.

General coping experience with the COVID-19 pandemic

The general coping experience with the pandemic COVID-19 refers to coping subcategories that were present in interviews of all nine participants. In the time of difficulties during the COVID-19 pandemic, all best copers effectively dealt with the situations by mostly being compassionate towards themselves.

This included self-compassionate thoughts related to an acceptance of difficult situations, especially those perceived by participants as out of control. Participants boosted themselves by remembering previous difficulties they overcame (their previous successes), by focusing on positive things (positive reinterpretation), and by comparing to others who they perceived as disadvantaged (especially comparing their new self to their old self). Participants' self-compassionate thoughts also involved preparing for, and planning for solutions to help them overcome their difficulties and make important decisions. No defense mechanisms were present in the participants. Participants invested more cognitive energy in planning and encouraging thoughts than in de-engagement strategies. Best scorers were self-compassionate in their emotions by practicing mindful satisfaction, savoring positive emotions, and as a consequence, they often felt contentment. On the other hand, they also felt fear during the COVID-19 pandemic. Best copers were motivated to care for themselves by recognizing and fulfilling their social needs and needs for activity. They also wanted to stay healthy and to be fit and many of their activities were planned and goal-oriented. This motivation was reflected in their leisure activities and their management. Best copers invested their energy in the adaptation to the pandemic situation in which they showed proactive approach to situations, such as compliance with pandemic safeguards. Setting boundaries towards other people as a form of social distancing helped them keep their integrity as well as to meet their need for health. On the other hand, boundaries towards other people also help to fulfil social needs because participants were more effective and active in their refined social network.

During the COVID-19 pandemic, best copers coped also by mutual compassion and compassion towards others. Best copers and people in their social network coped mutually by spending time together, doing activities together, and sharing together. During the pandemic, high copers were compassionate towards others by showing empathy to others which means they showed the cognitive ability to be connected to other people's suffering and to identify and understand other people's emotions.

Typical coping experience with the COVID-19 pandemic

The typical coping experience with the COVID-19 pandemic was defined as being present in data for more than half of the participants. The typical experience was described in addition to the general experience which included being compassionate towards self by using self-compassionate thoughts geared towards acceptance of situations, acceptance of self and one's weaknesses as well as acceptance of the difficulties with adjustment. Participants boosted themselves by remembering previous difficulties (achieving success), overcoming current difficulties by focusing on positive things (positive reinterpretation), and by comparing themselves to disadvantaged ones (especially comparing their new self to old self but also occasionally by

comparing self to others and comparing their own situation to other people's situations). High scorers nurture their empowerment by remembering their confidence in their own skills, their ability to cope, and their sense of humor, sometimes even the self-defeating kind of humor. The participants' self-compassionate thoughts involved searching for information, making decisions, preparing, and planning solutions for overcoming the difficulties which sometimes required retrograde assessment and sticking with the decision. High copers planned for big and small events, including their day-to-day, in order to better cope with the pandemic. They were courageous enough to reassess their values and even change their worldview, if necessary. High scorers engaged in psychological detachment and suppression. High scorers were self-compassionate in their emotions by savoring positive emotions during various activities, feeling contentment, joy, hope, gratefulness, and processing negative emotions while experiencing fear, anger, despair, disappointment, crying, insecurity, irritation, sadness, tiredness, health worries, and practicing mindful satisfaction in here and now. High scorers were aware of their own needs and motivated to care for themselves in their social needs, needs for activity (especially physical), needs to turn back to normal pre-pandemic life, needs to relax and switch off, work-life balance needs, needs to savor positive moments, and needs for happy endings. They motivated themselves to take care of their health and expressed mental growth and self-realization. High scorers invested their energy into active problem solving by solving health, relational (bilateral) and work (as they worked more) issues as well as adaptation to the pandemic situation. They also managed their activities by changing hobbies, dedicating more time to activities, doing more spontaneous activities, investing into leisure activities (most frequently walking followed by self-education, exercising, and watching movies and series). High scorers did set boundaries towards other people by for example reducing contact or changing the form of meetings and set boundaries toward rules too. Best copers not only were compliant with pandemic safeguards but they also thoughtfully assessed the recommended safeguards and, in some cases, decided to break rules to find a good balance for themselves.

During the pandemic, high scorers also coped by mutual compassion, compassion towards others and by receiving compassion from others. High scorers looked for closeness with others by initiating contacts with their loved ones, by seeking out interactions with others, and by making new acquaintances. During the meetings, the participants recounted mutual sharing of experiences, spending time together, and doing various activities together. High copers were compassionate towards others by showing empathy to others, being tolerant to others, expressing worries about others, being motivated to care for others' well-being, supported others by practical help, and also by working towards getting along with others when it was difficult during the pandemic. Best copers received compassion from others mainly in form of support, care, and understanding. The received compassion evoked joy in them which means that they

did not resist it but rather they accepted it and were able to enjoy it.

Discussion

In the current study, we aimed to map and structure coping strategies of participants scoring high in the COPE Inventory (Carver et al., 1989) during the COVID-19 pandemic. We used consensual qualitative analysis (Hill et al., 1997) to examine data collected by repeated in-depth interviews with nine of the participants who were the best copers (six participants initially and three added to check the data saturation), all randomly selected. The results showed that the coping strategies of the best copers during COVID-19 pandemic share an overarching theme of compassion. As defined by Strauss et al. (2016), compassion is a construct which includes our emotions, cognitions, motivations, and behaviours to alleviate suffering. We categorized the coping strategies into four main domains. Each domain has to do with compassion, but the object and the subject of compassion differed (from the most frequently mentioned to the least): self-compassion, compassion to others, compassion from others, and mutual compassion. Comparably, other authors divided compassion in a similar way: compassion for others, compassion from others, and self-compassion (e.g., Neff and Pommier, 2013; Beaumont et al., 2016; Gilbert et al., 2017; López et al., 2018).

Previous studies dealing with coping during the pandemic focused mostly on coping in general and tried to identify and understand the most common coping strategies. Studies that focused on adaptive coping reached similar conclusions than our study. For example, in addition to prevalent self-related coping strategies, Ogueji et al. (2021b) found that individuals often used strategies related to other people, such as Socializing with loved ones. This was reflected by our study in which participants described mechanisms of receiving and giving compassion or mutually providing it.

The most frequently mentioned and the most elaborated on was the domain of self-compassion. Tedeschi (2020, p. 1) wrote that „*Negative experiences can spur a greater appreciation for life*” when reflecting on posttraumatic growth in the times of the pandemic. This seems to be true for best copers in our research. Tedeschi and Calhoun (2004) distinguished five domains of posttraumatic growth: greater appreciation of life; improved relating to others; more personal strength; exploration of new possibilities; and intense spiritual growth. All of these domains were reflected in participants’ experiences as they recalled savoring good moments in life, improved relationships with others, empowering of themselves, perceiving strong need for activity and changing their world view. Instead of dwelling on the obvious negatives, best copers strive to turn negatives into positives not only for them, but for others too.

It is a healthy strategy to compare new self to our older versions of self as a way of boosting our self-confidence rather

than comparing yourself with others. In comparison, highly self-critical people are likely to compare themselves to ever rising unreachable standards or to privileged others which makes them feel contempt, disgust, and even hatred towards themselves instead of joy, hope, and contentment (Blatt, 2004).

Participants also encourage themselves by focusing on positive things in their life and on positive reinterpretation. They boosted themselves by remembering their previous successes in hardships. These are important strategies that seem to be valuable for well-being. Finding positive meaning is helpful in COVID times and these strategies bring stable well-being over time (Kim et al., 2022). Positive refocusing and reappraisal are negatively associated with depression, anxiety, insomnia, and social dysfunction (Molero Jurado et al., 2021). This was true for our participants who infrequently reported symptoms of depression, anxiety, and insomnia. On the contrary, they used self-caring thoughts, such as acceptance of negative pandemic situations, which was in line with research conducted by Lelek-Kratiuk and Szczygieł (2021) who found that coping strategy of acceptance was more present during COVID outbreak than in other stressful situations. Self-compassionate mental strategies during the pandemic, such as planning, making decisions, and solution seeking were mentioned frequently by our participants. Active cognitive processes involved in deciding on specific ways to manage the difficult pandemic situations showed that our participants had highly developed executive functions as evidenced by their ability to process information well, plan their actions, and execute their plans. Similarly, previous research found that planning was negatively related to depression and social dysfunction (Molero Jurado et al., 2021) and positively related to well-being during pandemic (Götmann and Bechtoldt, 2021). As mentioned, our participants sporadically reported symptoms of depression, rather, they maintained their well-being and stayed active in their communities.

In addition, our best copers were able to identify and communicate their negative emotions well. Schrauf and Sanchez (2004) found out that it is typical for a well-developed emotion vocabulary to be dominant by expression of negative emotions (50%) over positive (30%) and neutral (20%) emotions. Our best copers did not have such a big percentual difference in expressing their positive and negative emotions (43% of positive to 57% of negative emotional expressions), however, the expression of negative emotions was still dominant. We did not categorize expressions of neutral emotions since we had not asked participants to label them on their own. This greater balance between expressions of positive and negative emotions shown in our research might be attributable to deliberate and purposeful focusing on the participants’ good experiences as opposed to bad experiences. As Schrauf and Sanchez (2004) explained, people generally process positive emotions schematically since they do not pay much of attention to them because they just signal that everything is okay. Negative emotions are, however, processed differently because they indicate that something is not okay and thus, they need more attention and more thinking which results in higher verbal expressivity. Since these results were found to

be cross-culturally invariant, we propose they might be attributed to the differences in coping between general population and the best copers.

Other assets of high copers might be their ability to work with their emotions: be mindful, recognize and describe their emotions, process their emotions, and use them as a source of information for improving well-being. If the emotions were pleasant, our participants described savoring them. If they were unpleasant, our participants dealt with them. The participants allowed themselves to feel their emotions whether they were positive or negative and, thus, they were more compassionate towards themselves. Similarly, Greenberg (2011) suggested that people who were aware of all their emotions were more psychologically healthy. These findings are also in line with Gilbert et al. (2012) who suggested that resistance to affiliative and positive emotions is linked to self-criticism and all sorts of psychopathology. Other studies (e.g., Starr et al., 2020; Nook, 2021) also link high emotion differentiation with well-being and low emotion differentiation with psychopathology. Healthy people seemed to be the ones who can feel and be aware and process all sorts of emotions which makes them better prepared to deal with the stressful situations in general (e.g., Kashdan and Rottenberg, 2010). Emotionally resilient and optimistic people had less negative emotions relating to pandemic (Pandey et al., 2022).

Self-compassion and compassion to others is associated to positive affect (Gilbert et al., 2012) while fear of self-compassion and compassion from others are related to self-criticism, depression, anxiety, and stress. This has also reflected in our study. Best copers in our study were also highly compassionate to others as they take care of others and enjoy it and also highly self-compassionate people as they were able to enjoy care and interest from others.

One of the most interesting findings is the existence of a fourth type of compassion—Mutual compassion, which refers to deliberately taking care of myself and others simultaneously while suffering together with the aim to elevate the suffering for both of us. This kind of compassion might arise in the situations of collective suffering, such as a catastrophe or a pandemic and might have additional benefit of bringing people closer to each other in difficult times through experiencing intense sense of community (Peck, 1994, 1998). However, this is the first time mutual compassion emerged from the data in comparison to previous two (e.g., Strauss et al., 2016) or three kinds of compassion (e.g., Gilbert et al., 2017) identified in the scientific literature. The results also support previous findings about the needs and strategies of coping in mutual relationships by socializing (Ogueji et al., 2021b), connecting with friends and family, engaging in community groups and activities (Greenwood-Hickman et al., 2021), but also reflect the changes and coping on various levels of social systems—in link with Salin et al. (2020) perspective of relationship level following the mutual compassionate competencies.

In sum, we identified 111 subcategories of coping strategies. These are distinct strategies that people used to cope with the

pandemic and possibly with any other stressful situation in their life. Among these, there were adaptive coping strategies that improve level of functioning and are healthy ways of approaching a problem and focus primarily on problem solving. However, participants also used non-adaptive coping strategies, such as overreaction to situations or avoiding stressful situations. Such coping controversy has been previously reported as short-term adaptive coping strategy (Pandey et al., 2022). This is also in line with conceptual framework of coping strategies mentioned by Skinner et al. (2003). Common divisions of coping strategies (such as into problem-focused versus emotion-focused, approach versus avoidance, cognitive versus behavioral, etc.) are not helpful and could be misleading. Groups of coping strategies are not exhaustive and even the definitions of the groups are not clear. Skinner et al. (2003) therefore discourage from using functional and topological distinctions of coping strategies. We also provided evidence for this idea. In this study, best copers are not primarily best copers because they use only problem-focused or adaptive strategies all the time when facing challenges, but they are best copers because they have a variety and a certain number of coping strategies available, and they can literally choose which one is the best for them in any given moment based on their goals and functions of the coping strategy. So, their choice is much easier to be carried out and they do not need to stick with one decision, one coping strategy. They can alter the strategies according to the situation or development of the situation based on their assets and inner and outer resources. Thus, they are more successful in coping with stressful situations.

Analyzing the strategies of high scores allowed us to identify the profiles of most adaptive coping strategies during the pandemic. Our profiles of general and typical best copers are valuable information for researchers as well as practitioners. In addition to applied research that examines best intervention strategies for pandemic coping (Fernández-Ávalos et al., 2021), our study provides a theoretical background to the understanding of what works and can serve as a point of reference for dealing with any potential future pandemics. Our profiles are comparable to engaged coping profiles identified by Kavčič et al. (2022) that are characterized by unique combination of coping strategies—approach-oriented coping with acceptance. The engaged coping profile shows high well-being which is corroborated with results from our research as well.

Limits

This study has several limitations. First, the findings from our national sample might not be applicable to other countries because different countries followed different sets of safeguards which might have impacted the citizens' stress levels. Second, the self-reported COPE inventory (Carver et al., 1989) did not include a socially desirable scale that could help to exclude responders consciously or unconsciously willing to be perceived in a better way, therefore, we were reliant on the participants' subjective

reports of their coping strategies. Third, our sample consisted of volunteers. It has been shown that volunteer participants could differ considerably from general population. Volunteers in research tend to be more interested in the research topic and are more sociable (Rosenthal and Rosnow, 1975). Both of these characteristics could alter our results. Moreover, our initial sample of best copers were all women (even though they were randomly selected). Female participants seem to be more common in psychology research (e.g., Davis et al., 2012; Friesen and Williams, 2016). We included two men in an attempt to balance our sample. Further limitations are also related to our sample, specifically to its size, which was relatively modest, and its socio-demographic indicators. In addition to most of the participants being female, the participants were also in 20–46 age range and had a medium-high education level which might have served as an advantage in dealing with the pandemic compared to individuals with lower socio-economic status. Similarly, other factors might have contributed to our participants' best coping strategies that were not considered in this study, such as personality traits (Rettew et al., 2021) and religion (DeRossett et al., 2021).

Finally, the last two limitations relate to the researchers who conducted the interviews. All researchers were females in young or middle adulthood. Based on their traditionally dominant gender norms, however, female interviewers might be more likely to help male participants with articulating and expressing their emotions (Lefkowich, 2019). We also did not do face-to-face interviews because of COVID restrictions, and it might be harder to build rapport in communication *via* phone and video-conferencing, which might have led to our participants being less open during our interviews.

Future research

Research focused on understanding coping strategies of high copers during other types of stressful events could expand the list of best coping practices. Similarly, having cross-cultural samples to determine whether there are any general or variant coping strategies related to different cultural contexts would be useful. It would also be important to compare the best copers with the worst copers to potentially inform prevention and intervention programs.

Implication for practice

According to the findings of this study, interventions aimed at cultivating emotional intelligence and resilience, mindfulness, compassion, and flexibility in various coping strategies might be very beneficial for mental and physical health of people during a pandemic or a similar global catastrophe. In developing such interventions, researchers might be inspired by the ways of how the best copers dealt with the pandemic COVID-19 in our study.

Conclusion

People with high coping skills can thrive even in difficult situations, such as global pandemic. They are able to process their negative emotions, savor positive emotions, motivate themselves to engage in self-care, focus their thoughts to empower themselves, actively solve problems that are solvable and accept the problems that are out of control, and compassionately take care of not only their own needs but also of mutual needs and needs of other peoples. On the top of that, high copers are also able to enjoy compassion from others.

Data availability statement

The original contributions presented in the study are included in the article, further inquiries can be directed to the corresponding author.

Ethics statement

The studies involving human participants were reviewed and approved by the Ethical Committee of Faculty of Social and Economic Sciences of Comenius University in Bratislava. The patients/participants provided their written informed consent to participate in this study.

Author contributions

KK, KG, BS, and MB: writing – original draft, data curation, data analysis, and writing – review and editing. JH: conceptualization, writing – original draft, data analysis, auditor, writing – review and editing, and funding acquisition. All authors designed the research. All authors contributed to the article and approved the submitted version.

Funding

This work was supported by the Slovak Research and Development Agency under the contract no. PP-COVID-20-0074. Writing this work was supported by the Vedecká grantová agentúra VEGA under grant 1/0075/19.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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OPEN ACCESS

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SPECIALTY SECTION
This article was submitted to
Organizational Psychology,
a section of the journal
Frontiers in Psychology

RECEIVED 22 October 2022
ACCEPTED 09 January 2023
PUBLISHED 06 February 2023

CITATION
Lister K, Andrews K, Buxton J, Douce C and
Seale J (2023) Assessment, life circumstances,
curriculum and skills: Barriers and enablers to
student mental wellbeing in distance learning.
Front. Psychol. 14:1076985.
doi: 10.3389/fpsyg.2023.1076985

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Assessment, life circumstances, curriculum and skills: Barriers and enablers to student mental wellbeing in distance learning

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Student mental wellbeing is increasingly a priority for universities, and this is particularly critical in a distance learning context. Studies have found that studying, academic pressure, university culture and systems can affect students' mental health. There are increasing calls for universities to take a compassionate, holistic approach to supporting student wellbeing, and identify the barriers that are created by university cultures, systems, pedagogies, curricula, tuition and assessment practices. This study aimed to identify barriers and enablers to student mental wellbeing in distance learning, and students' recommendations for changes to be made. Using a student survey (N=584), we identified that assessment and life circumstances were the most significant barriers, while the greatest enablers were building study skills, the people in students' lives, and curriculum and module content. The study revealed significant demographic differences in how students experience barriers and enablers, and how likely they feel they are to benefit from solutions. Students with disclosed mental health difficulties were consistently more likely to experience barriers than students without a disclosure, while enablers were experienced by all demographic groups. The study concludes that assessment should be prioritised as an area for action.

KEYWORDS

mental health, mental wellbeing, students, compassion, participatory, social model

1. Introduction

Student mental health and wellbeing is an increasingly high priority for universities (Evans et al., 2018; Hughes and Spanner, 2019). In the United States, it is estimated that a third of students experience mental health difficulties (Lipson et al., 2018), and in Australia, studies have found consistently higher levels of psychological distress, depression and anxiety in students than in the general public (Stallman, 2010; Larcombe et al., 2016). In the United Kingdom, frequent media attention (e.g., Murugesu, 2019; Weale, 2020) and high profile individual cases (BBC News, 2020) have ensured that student wellbeing is of high priority in sector policy and strategy (Hughes and Spanner, 2019; Universities UK, 2020) and is increasingly high on academic research agendas (e.g., Hartrey et al., 2017; Jones et al., 2018; Ribeiro et al., 2018).

This paper reports findings from a study into barriers and enablers to mental health and wellbeing that distance learning students experience in higher education (HE). Distance learning students are often overlooked in literature relating to student wellbeing; this paper shares insight into their experiences, aiming to answer three research questions:

1. What barriers to mental wellbeing do distance learning students experience, and are particular demographic groups more likely to experience these barriers?
2. What enablers to mental wellbeing do distance learning students experience, and are particular demographic groups more likely to experience these enablers?
3. What changes do distance learning students recommend that would enhance mental wellbeing in distance learning?

Terminology relating to mental health is contentious (Davies, 2013; Hughes and Spanner, 2019). In this paper, we follow the approach adopted by UK HE sector bodies; we use the term ‘mental health’ to signify issues that have been medically diagnosed and ‘mental wellbeing’ to cover a broader spectrum of undiagnosed issues such as anxiety and depression. We define ‘barriers’ and ‘enablers’ as determinants within students’ higher education experiences that have a significant positive or negative impact on their overall mental wellbeing.

2. Background and literature

2.1. Mental wellbeing in higher education

Research shows that mental health can have a significant impact on students’ likelihood of success, in terms of their likelihood to complete their studies, their academic attainment and their likelihood to progress (Richardson, 2015; Office for Students, 2019; Lister et al., 2021). Studies suggest that higher education (HE) may have a negative effect on students’ mental health. In the United Kingdom, university students’ mental health is consistently found to be lower than the mental wellbeing of the general population of comparative age (Neves and Hillman, 2019; Office of National Statistics, 2020). Studies have found that studying, academic pressure, university culture and systems may be affecting students’ mental health (Tinklin et al., 2005; Brown, 2016; Ribeiro et al., 2018; Winzer et al., 2018; Lee and Kim, 2019); for example, Tinklin et al. found that higher education ‘systems’ and ‘structural issues’, ‘had exacerbated and even created some of the students’ difficulties’ (Tinklin et al., 2005, p: 510). A dataset analysis of 80,509 students attending college counselling centres in the United States, United Kingdom and Canada confirmed this, finding that ‘academic distress’, including ‘academic performance, pressure to succeed, and postgraduation plans’, was the most unique predictor of anxiety (Jones et al., 2018, p: 253).

Ribeiro et al. found in a systematic review that ‘psychological suffering is inherent in academic life’ (Ribeiro et al., 2018, p: 6). And while a certain level of stress is expected as part of academia, there is a strong case that higher education needs to become more compassionate, and should adapt or update some of the systems, structures and academic practices that cause undue mental health difficulties. Students have called for changes to different areas of academia in order to improve mental wellbeing; these include: ‘Academic teachers and teaching practices; student services and support; environment, culture and communication; course design; program administration; assessment; and student society activities’ (Baik et al., 2019, p: 674).

Assessment is particularly identified in the literature as a potential barrier to wellbeing (Jones et al., 2020). Assessment is heavily value-laden, and practice has been slow to evolve; particularly in summative assessment (Boud and Falchikov, 2007; Hanesworth et al., 2019). Galante et al. talk about levels of ‘psychological distress’ during exams

(2018), and Jones et al. identify assessment design, collaborative work, challenges of assessment workload and post-assessment feedback as ‘psychological threats’, both in summative and formative assessment (2020). Baik et al. also found that assessment design impacted on wellbeing, with student perceptions of clarity and fairness in design being particularly critical (2019), while Hill et al. highlight impacts of assessment feedback on student wellbeing (2021). Specific assessment activities, such as groupwork, can be a barrier for wellbeing (McPherson et al., 2019), while impacts of power dynamics involved in faculty-centred as opposed to student-centred pedagogies have been found to affect students’ confidence and wellbeing (Felton and Stickley, 2004; Hill et al., 2019). Feeling ‘overwhelmed’ has been linked to student withdrawal (Weller et al., 2018, p: 43), and, of course, failure and fear of failure are also major contributors to student academic stress or distress (Whittle et al., 2020).

Pedagogy and curriculum are also recognised to contain barriers to wellbeing. For example, Tinklin *et al* identified ‘Lack of understanding among lecturers’ and ‘badly designed learning experiences’ as barriers (2005, p: 510), and Baik *et al* found that lack of clarity in teaching materials, low levels of classroom interaction and lack of variety in activities impacted negatively on wellbeing (2019). Specific activities, such as groupwork, can be a barrier for wellbeing (McPherson et al., 2019), while impacts of power dynamics involved in faculty-centred as opposed to student-centred pedagogies have been found to affect students’ confidence and wellbeing (Felton and Stickley, 2004; Hill et al., 2019). Feeling ‘overwhelmed’ by curriculum content has been linked to student withdrawal (Weller et al., 2018, p: 43), and distressing curriculum content has been shown to present particular mental health challenges for some students (Slavin et al., 2014; Bentley, 2017).

Barriers to wellbeing may also be linked with students’ skills and resilience (Houston et al., 2017; Galante et al., 2018; Holdsworth et al., 2018; McAllister et al., 2018). For example, Hewitt and Stubbs identify that difficulties with interpersonal skills, the skills involved in managing workload, and the discipline-specific study skills necessary to achieve good grades, may be a cause of depression, anxiety and stress for students (2017). Similarly, Barrable *et al* found that stress associated with ‘study skills difficulties’, particularly around ‘time management, staying motivated, and memory techniques’ (2018) were a trigger for mental ill health and negative feelings. Galante *et al* posit that lack of resilience in dealing with exam stress causes increases in numbers of students seeking counselling support (2018), and Holdsworth *et al* maintain that students should be taught to develop resilience in higher education in order to deal with ‘constant change and stress’ without negatively affecting their mental health (2018).

In line with broader societal shifts in thinking around mental health (Davies, 2013), there are increasing calls for universities to take a more compassionate, proactive and holistic approach to supporting student wellbeing (Houghton and Anderson, 2017; Hughes and Spanner, 2019; Universities UK, 2020). However, there is a lack of consensus in HE around how best to do this (Hartrey et al., 2017). This has led to a plethora of studies trialling interventions-based approaches such as mindfulness (Galante et al., 2018) or therapy (Viskovich and Pakenham, 2018). These studies generally show only limited or short-term success (Winzer et al., 2018), and have not addressed the underlying issues in university norms and culture. There is a need to take a more social model approach (Oliver, 1983), working in partnership with students (Piper and Emmanuel, 2019; Lister, 2022) and adopting a lens of compassion

(Gilbert, 2016), and address the barriers to mental wellbeing within the HE environment, instead of a deficit model focusing only on individuals.

2.2. Mental wellbeing in distance education

The need to address barriers to mental wellbeing applies particularly to distance learning. While literature suggests that part-time adult learning can be beneficial for wellbeing (Field, 2009; Waller et al., 2018), evidence suggests that students in distance learning are more likely to disclose an existing mental health difficulty, may be more likely to need support (Barr, 2014) and that their needs and challenges may be less visible to the university (Coughlan et al., 2021; Coughlan and Lister, 2022). For example, in 2018–19, 9.6% of Open University (OU) students (12,813 in total) disclosed a mental health condition compared to the UK HE average of 2.5% (Advance, 2018). Furthermore, the OU's Access and Participation Plan identifies a consistent module completion gap since 2013, with the overall percentage of students completing modules around 16 percentage points lower for students with mental health disclosures (The Open University, 2019). This has not been sufficiently addressed in the literature; most studies trialling interventions have focused on a campus environment, and many of the solutions posited translate poorly to a distance learning environment. Studies are needed that apply a critical lens to the cultures, systems, pedagogies, curricula, tuition and assessment practices in distance learning, and identify the barriers these raise for students' mental health.

In a small qualitative study, Lister et al. interviewed 16 students who had disclosed their mental health condition about their experiences of studying at a distance learning institution (Lister et al., 2021). Lister et al. mapped barriers and enablers to different aspects of students' higher education experiences, drawing on the 'capabilities approach' (Nussbaum, 2000). The capabilities approach recognises the relationships between wellbeing and external capabilities, such as culture and the impact of affordances or obstacles presented by a person's environment and context (Nussbaum, 2000; Robeyns, 2005). Later interpretations of the capabilities approach also recognise the role of internal capabilities, such as skills building, and identifying ways skills can be formed, developed, used and measured, in order to contribute to broader capability (Heckman and Corbin, 2016). In a higher education context, external capabilities may relate to environment (such as systems, spaces and people) and study-related capabilities (such as curriculum, assessment and pedagogy), which Lister et al. depicted as a taxonomy, shown in Figure 1. This taxonomy illustrates relationships between barriers and diametrically corresponding enablers, and indicates relationships between adjacent themes within both barriers and enablers.

In the study reported in this paper we seek to build on Lister et al.'s study by examining the barriers and enablers experienced by a larger sample of distance education students. The study took place in the Open University (OU), a large UK distance learning university with over 140,000 students. At the time of the study (2020–21), 18,498 (12.4% of) OU students disclosed a mental health condition, and recent reporting showed consistent gaps in attainment (1.3 percentage points) and module completion (15.7 percentage points) for students with mental health difficulties (The Open University, 2019). The survey was part of a larger project to identify changes that could be made to better support students' mental wellbeing in distance learning environments, study and skills-building; this larger project included staff and student focus

groups (Lister, 2021), pilot projects and a staff survey (publication to follow).

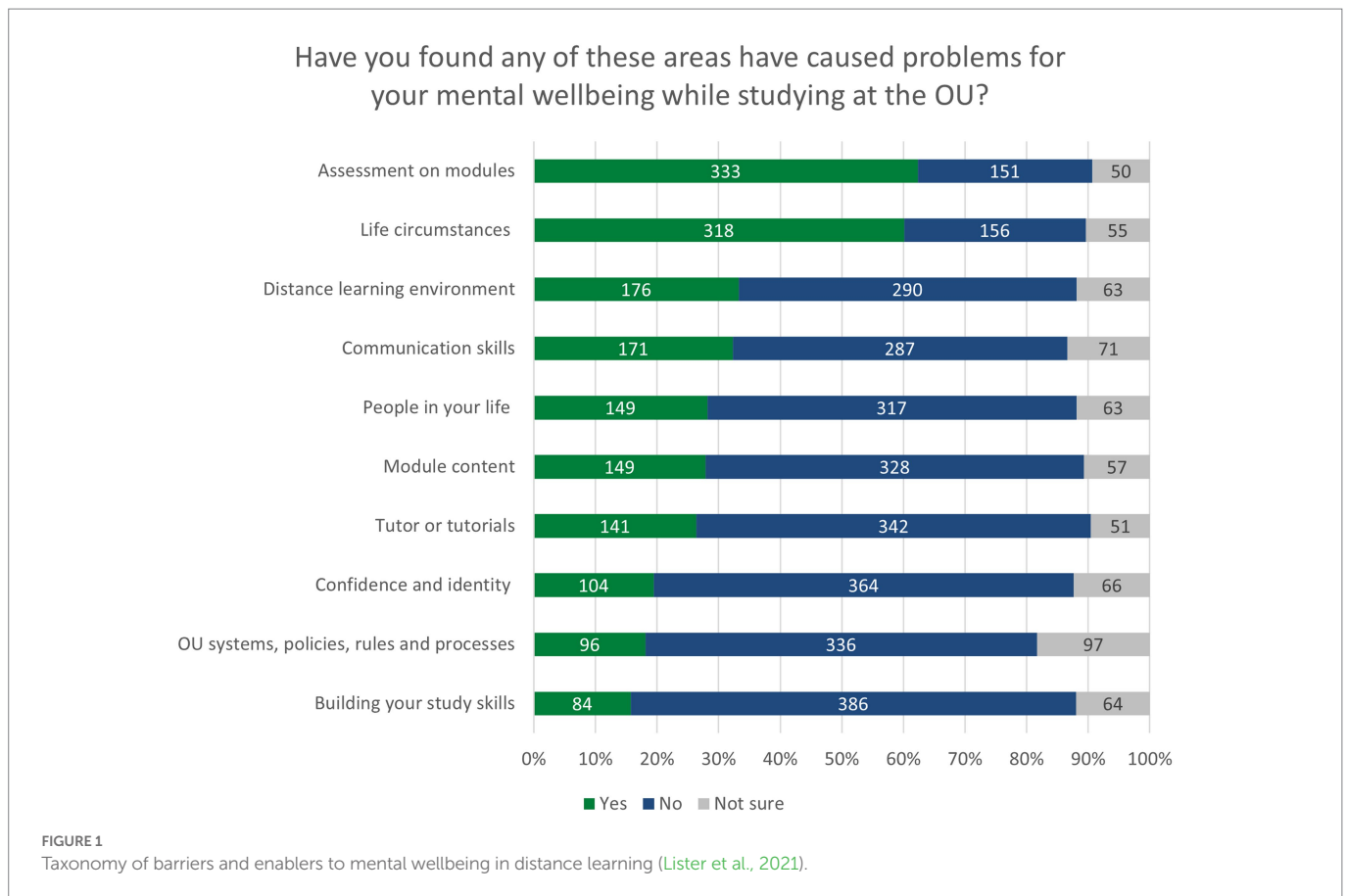
3. Materials and methods

The project of which this study is part aligns to the critical (or transformative) educational research paradigm, as it seeks not only to understand phenomena but identify ways to redress inequalities inherent within them (Cohen, 2007; Mertens, 2007). It adopts critical pedagogy (Freire, 1970) and the social model of disability (Oliver, 1983) as theoretical frameworks, identifying systemic oppression in educational practice that impacts on student mental wellbeing, and positioning these as barriers to equity that educators have a responsibility to address. In line with this, it holds to the ideology, principles and methods of participatory inquiry (Heron and Reason, 2016), recognising students' lived experience as expertise.

This paper explores an aspect of the wider project; a survey that aimed to gather data from students on barriers and enablers they had experienced in distance learning, and seek their ideas for changes that could be made. The study and survey instrument were approved by the OU Human Research Ethics committee, Student Research Project Panel, and Data Protection team. The survey instrument is available as supplementary material.

The survey instrument was collaboratively designed with three students who had disclosed mental health conditions, following a participatory design approach. Students worked from a first draft of the instrument, and suggested wording for questions, multiple choice options and refined the question order. An iterative approach was followed, with students collaborating on four drafts before the survey instrument was finalised.

As part of the ethical design, the survey wording and question order were designed to avoid causing distress to participants. The survey opened and closed with general, light-touch questions, aiming to provide a positive onboarding and offboarding experience (e.g., 'Has your mental health had an effect on your OU studies at all?' and 'On the whole, do you find OU study to be good or bad for your mental wellbeing?') After the onboarding questions, section two of the survey focused on positive effects that study had had on mental wellbeing, encouraging the critical consciousness about the positive role study could play on mental health (i.e., 'Have you found any of these areas have helped your mental wellbeing while studying at the OU?' followed by a list of aspects of study with yes/no/not sure options, and a free text question.) The opening text for section two advised students that section three would be asking about negative impacts of study on mental wellbeing, so students were forewarned this would be coming (this included the question 'Have you found any of these areas have caused problems for your mental wellbeing while studying at the OU?' followed by a list of aspects of study with yes/no/not sure options, and free text question.) Immediately after this, section four focused on support and guidance that was available to students, encouraging them to reflect on what had had a positive impact on them and aiming to raise awareness of any support of which students may not have been aware. The text introducing this section advised that links to all the guidance and support could be found at the end of the survey, aiming to provide practical support to students, while balancing this against the risk of distracting students from completing the survey. The following section asked students' opinions of specific OU wellbeing initiatives, and the final section asked about broader impacts of distance learning on mental wellbeing, (e.g., 'In general, how well do you feel your



mental wellbeing has been supported by OU module curricula, assessment and the learning activities you take part in?') aiming to provide distraction and a sense of perspective for any students who may have found it distressing to reflect on negative mental health experiences.

Care was taken to support students; they were advised in the open comment sections that the anonymous nature of the survey meant staff would not be able to respond to any queries raised in the open comment questions, but they were given links to mental health support pages in the question text in case they needed assistance. The survey closed by thanking the students, providing links to the different support options mentioned previously, and wishing students positive mental health and success in their studies.

The survey was piloted with 12 students (eight female, four male) in order to check the validity, particularly in terms of checking that the language was understandable, the questions were framed correctly and that there were no omissions in questions or multiple choice options (Johanson and Brooks, 2010).

3.1. Participants

This study sought to gain insight from students both with and without disclosed mental health conditions, using a stratified, random sampling technique. Two stratified random samples were obtained from the University Surveys team; these comprised a total of 5,000 students studying during academic years 2019/20 and 2020/21. The first sample consisted of 2,500 students who had disclosed a mental health condition to the university; the second sample consisted of 2,500 students who had not disclosed any mental health conditions. The samples were stratified

to be representative of the broader cohort in terms of gender, ethnicity, faculty and geographic location, with under 1.4% variance.

In total, 584 students responded to the survey, a response rate of 11.68%. The response rate was higher for students disclosing a mental health difficulty; of the 2,500 students who were invited, 340 responded, resulting in a 13.6% response rate from this group compared to a 9.76% (N = 244) response rate from the 2,500 students who did not disclose a mental health condition.

Participant demographics are shown in Table 1, below. Due to small numbers, some of the classifications were later grouped for analysis (i.e., in 'previous educational qualification,' the 'no formal qualification' group was combined with 'less than A-levels.'). Socio-economic status was measured using the UK index of multiple deprivation (IMD) which classifies participants' relative deprivation according to postcode area.

3.2. Analysis

The survey analysis followed a participatory approach, with students forming part of the analysis team and leading on aspects of the analysis. The survey captured frequency data and open comments, and was analysed using SPSS and NVivo. Frequency data was analysed using descriptive statistics to identify barriers, enablers and impacts. Crosstab analysis of frequency data was used to contrast the findings from different demographic groups, between students disclosing and not disclosing a mental health condition, and students at different stages of study. Pearson's Chi squared was used to determine statistical significance, with an alpha level of 0.05 for all statistical tests. Open comments in the survey were analysed in NVivo using Thematic Analysis (Braun and Clarke, 2006).

TABLE 1 Survey respondent demographics.

Participant characteristic		Count	%
Mental health disclosure	No	244	42%
	Yes	340	58%
Age	Under 25	120	21%
	26–35	155	27%
	36–45	115	20%
	46–55	121	21%
	56 and over	73	13%
Previous educational qualification	No formal qualifications	14	2%
	Less than A Levels	163	28%
	A Levels or equivalent	142	24%
	HE Qualification	135	23%
	PG Qualification	35	6%
	Not known	95	16%
Gender	Female	432	74%
	Male	152	26%
Ethnicity	Asian	13	2%
	Black	15	3%
	Mixed	20	3%
	Other	9	2%
	Refused	7	1%
	Unknown	9	2%
	White	511	88%
Socio-economic status (IMD, by postcode)	0–20%	121	21%
	20–40%	116	20%
	40–60%	106	18%
	60–80%	100	17%
	80–100%	103	18%
	Non-UK or unknown	38	6%
Disability (other than mental health)	No	500	86%
	Yes	84	14%

4. Results

This section reports the findings of the survey. First, it reports impacts of students' mental health on their studies, followed by barriers and enablers to mental wellbeing they experienced and the impact that distance learning had on them. Finally, it reports their suggestions for, and prioritisation of, changes to make distance learning more conducive to mental wellbeing.

4.1. Mental health in distance learning

As shown in Figure 2, 87.7% ($N=477$) of students stated that their mental health had had an impact on their studies; only 4.1% ($N=24$) reported a positive effect, while 38.9% ($N=227$) reported a negative effect and 38.7% ($N=226$) reported that their mental health had had

both positive and negative effects on their studies. Students disclosing a mental condition reported significantly more negative and mixed effects, while fewer reported positive or no effects on their studies [$X^2(3, N=584)=83.304, p<0.001$].

4.2. Barriers

In the small-scale qualitative study reported by Lister et al. (2021), 10 barriers to mental wellbeing were identified relating to Study, Skills and Environment (see Figure 1). The results from our survey indicate that respondents experienced the same barriers. Certain barriers were experienced by higher numbers of students; 62.4% ($N=333$) of students found 'assessment, deadlines or feedback' had caused problems for their mental wellbeing, and 60.1% ($N=318$) of students stated that their life circumstances while studying had been a barrier for them. In contrast to this, only 18.1% ($N=96$) of students found that 'OU systems, policies, rules and processes; had been a barrier for them, and only 15.7% ($N=84$) found that building their study skills had been a barrier. The results across all 10 areas are shown in Figure 3.

The responses were analysed for statistically significant variations according to the following criteria:

- Socio-economic status
- Gender
- Ethnicity
- Age
- Mental health disclosure
- Other disability (excluding a mental health disclosure)
- Previous educational qualifications

There were statistically significant differences in nine of 10 areas for students who disclosed a mental health condition. In every area except 'the distance learning environment,' students with a disclosed a mental health condition were more likely to experience a barrier than students without a mental health disclosure. These are shown in Table 2, below.

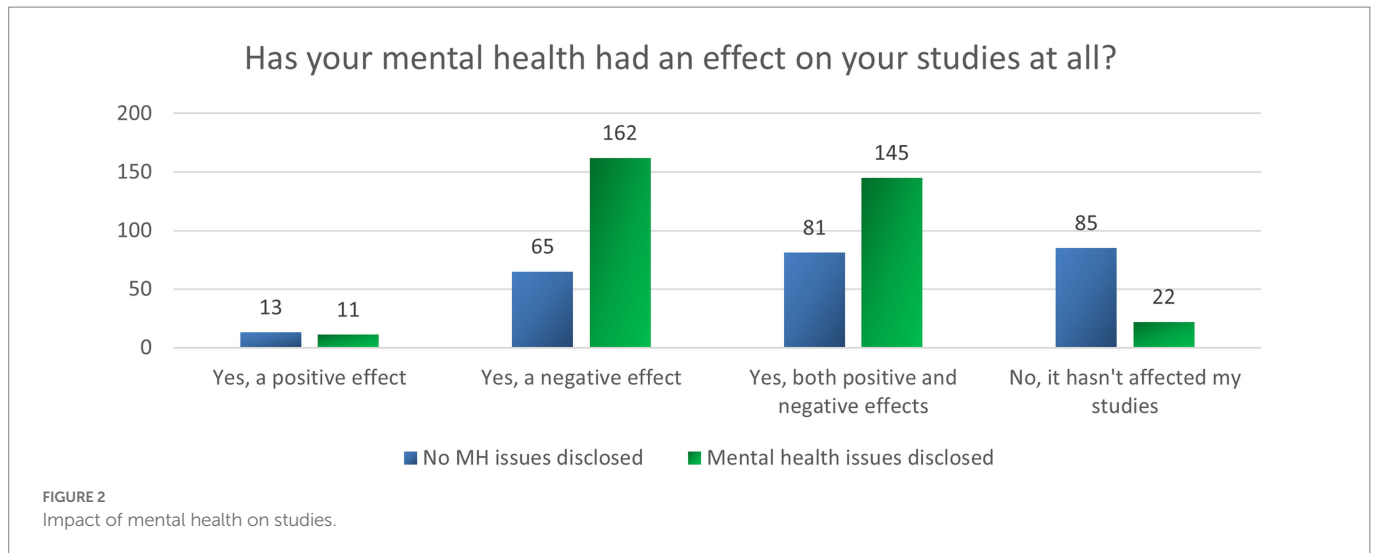
Four of the barriers were also statistically significant for certain students depending on their age, gender, socio-economic status or whether they disclosed a disability.

'Building communication skills' was more likely to be a barrier for:

- Women: 34.4% of women compared to 26.1% of men recorded this as a barrier [$X^2(2, N=529)=8.573, p=0.014$].
- Students with low socio-economic status: 41.7% of low SES students recorded this as a barrier, compared to 33.2% of mid-level SES and 25.8% of high SES [$X^2(6, N=529)=15.350, p=0.018$].
- Students between 26 and 45 years old: 37.9% recorded this as a barrier, compared to 34.3% of students under 25 and 23.9% of students over 46 [$X^2(4, N=529)=9.623, p=0.047$].

'Assessment' was more likely to be a barrier for:

- Younger students: 77.9% of students under 25 years old recorded this as a barrier, compared to 68.9% of students 26–45 years old and 45.2% of students over 46 [$X^2(4, N=534)=39.224, p<0.001$].
- Students with a disability other than mental health: 60.1% recorded this as a barrier, compared to 49.9% who disclosed no disability or only mental health [$X^2(2, N=534)=6.405, p=0.041$].



'Module content' was more likely to be a barrier for students disclosing a disability other than mental health, with 37.5% ($N=30$) stating it was a barrier, compared to 26.2% ($N=119$) without a disability or disclosing mental health issues alone [$X^2(2, N=534)=7.726, p=0.021$].

'Life circumstances' were more likely to be a barrier for younger students, with 74.5% ($N=76$) of students under 25 recording this as a barrier, compared 62.6% of students 26–45 ($N=152$) and 48.9% ($N=90$) of students over 46 [$X^2(4, N=529)=22.393, p<0.001$].

Students also provided free text responses about 'anything that had a negative impact on your mental health while studying at the OU'. This resulted in 301 comments, which were analysed in NVivo and led to 427 coded references. Numbers and examples of coded references per theme are shown in Table 3.

4.3. Enablers

In the small-scale qualitative study reported by Lister et al. (2021), 10 enablers to mental wellbeing were identified, relating to Study, Skills and Environment (see Figure 1). The results from our larger survey indicate that respondents experienced the same enablers. The numbers and percentages of students reporting positive impacts or enablers were generally higher than those reporting barriers. As with barriers, certain enablers were experienced by higher numbers of students; 63.7% ($N=358$) of students found that building their study skills had supported their mental wellbeing, and 64.8% ($N=355$) of students stated that the people in their lives has been a positive factor. In contrast to this, only 34.9% ($N=191$) of students found that life circumstances had been an enabler for them, and only 24.6% ($N=135$) found that 'OU systems, policies, rules and processes' had played a positive role. The results across all 10 areas are shown in Figure 4.

An interesting finding, in stark contrast to the barriers, was that having disclosed a mental health declaration did not make a statistically significant difference to students' experience of enablers. The only area where students with mental health responded significantly differently was in assessment, as students disclosing a mental health condition were less likely to experience assessment as an enabler: 48.9% ($N=160$) of students with mental health conditions declared it was not an enabler, compared to 39.6% ($N=93$) of students without a disclosure [$X^2(2,$

$N=562)=10.857, p=0.004$]. This implies that enablers are positively experienced in general by students, while barriers appear more keenly felt by students with diagnosed mental health difficulties.

In contrast to this, participants' age, socio-economic status, gender, and ethnicity had a more significant impact on the responses than a mental health disclosure. Age was significant in five of the 10 areas, with younger students less likely to experience enablers (shown in Table 4.)

Socio-economic status was a significant factor in two areas, with students with lower socio-economic status (i.e., in the bottom 20% of the IMD) less likely to experience enablers in:

- module content: 53.4% of low SES students rated this as an enabler, compared to 64.0% mid-SES and 62.0% high SES [$X^2(6, N=562)=13.787, p=0.032$].
- life circumstances: 28.1% of low SES students rated this as an enabler, compared to 32.0% mid-SES and 45.9% high SES [$X^2(6, N=548)=16.402, p=0.012$].

Gender was a significant factor in one area, building study skills. 65% of women found building and developing their study skills an enabler compared to 59.9% of men, and 27.5% of men said it was not an enabler for them compared to 16.2% of women [$X^2(2, N=562)=9.838, p=0.007$].

Ethnicity was significant in one area: assessment. Black and minority ethnic students were less likely to find assessment an enabler with only 30.4% stating this compared to 38.3% of white students [$X^2(4, N=562)=11.947, p=0.018$].

Students also provided free text about 'anything that helped your mental health while studying at the OU'. The 321 comments received were analysed in NVivo, resulting in 384 coded references that broadly corresponded with the taxonomy and the 10 themes in the survey. The numbers and examples of coded references per theme are shown in Table 5.

4.4. Impact of study on wellbeing

Overall, 71% of students ($N=353$) stated that study had an overall positive impact on their mental health, implying that the impact of enablers outweighed that of the barriers. This was felt across all demographics; the only one showing slight significant difference was age [$X^2(4, N=497)=10.530, p=0.032$]. Students in the 'under 25' and

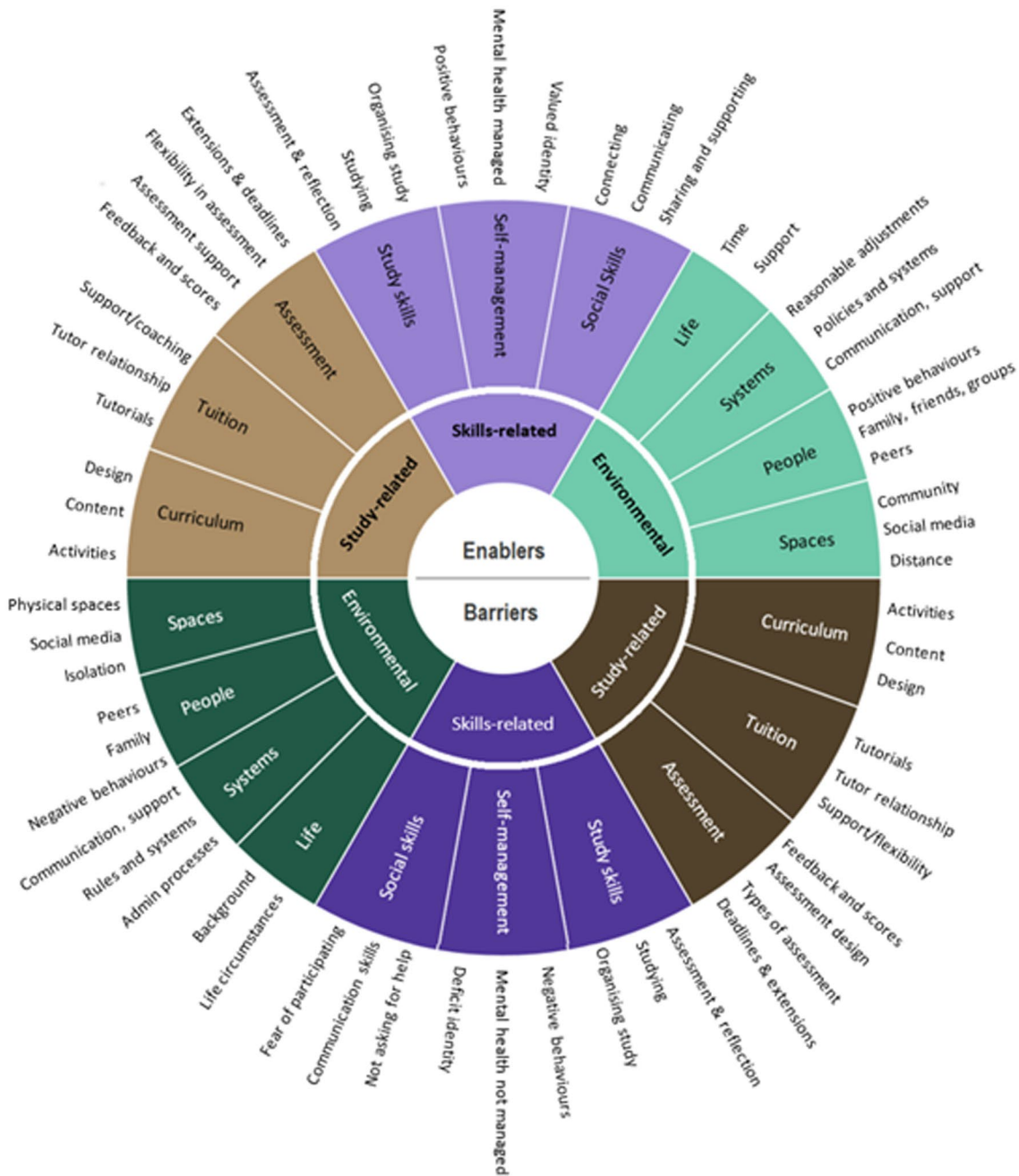


FIGURE 3
Taxonomy of barriers and enablers to mental wellbeing in study. Figure copyright: Kate Lister, Jane Seale & Chris Douce (CC-BY 4.0).

'26–45' age brackets were slightly more likely to say that study was neutral or bad for their mental wellbeing, but were still in the minority; 64.2% (N=61) of students under 25 and 67.2% (N=154) of students between 26 and 45 states OU study was good for their mental wellbeing.

This was similar when looking at specific groups of barriers and enablers. For example, when asked about skills-related barriers/enablers, 50.1% (N=249) of students felt that their mental wellbeing had been well or very well supported as they developed study skills, communication skills and other competencies through study, and 39.6% (N=197) were neutral. There were no significant differences within demographics.

In relation to study-related barriers/enablers, 42% (N=210) of students stated their wellbeing had been well or very well supported by

module curricula, assessment and the learning activities, and 44.1% (N=219) were neutral. However, students disclosing a mental health condition were slightly less likely to state this, with 41.3% (N=121) saying 'well' or 'very well' and also 41.3% (N=121) being neutral [$\chi^2(2, N=497) = 8.631, p = 0.013$]. This may relate to the strong differences around experiences of assessment for students with mental health issues.

Finally, in relation to environmental barriers/enablers, 62.2% (N=309) of students stated their wellbeing had been well or very well supported by OU environments, systems and people; 28.6% (N=142) saying they were neutral and 9.3% (N=46) saying it has been badly supported in this area. Interestingly, students disclosing a mental health condition were more polarised in this area, with 67.2% (N=182) saying

TABLE 2 Survey findings: barriers by mental health declaration.

Category	% barrier all students	% barrier, with MH declaration	% barrier without MH declaration	Pearson's Chi Square
Assessment on modules	62.40%	71.90%	48.90%	$X^2(2, N = 534) = 36.452, p < 0.001$
Your life circumstances in general while you have been studying	60.10%	67.90%	49.30%	$X^2(2, N = 529) = 28.945, p < 0.001$
The distance learning environment, forums or student social media	33.30%	35.10%	30.80%	Not significant: $X^2(2, N = 529) = 1.205, p = 0.547$
Building skills in communicating with your tutor or your peers	32.30%	40.60%	20.80%	$X^2(2, N = 529) = 34.652, p < 0.001$
Module content	28.20%	33.10%	21.30%	$X^2(2, N = 529) = 15.053, p = 0.001$
The people in your life while you have been studying	27.90%	31.60%	22.60%	$X^2(2, N = 534) = 18.1, p < 0.001$
Tutor or tutorials	26.40%	31.00%	19.90%	$X^2(2, N = 534) = 19.362, p < 0.001$
Confidence and identity as an OU student	19.50%	23.00%	14.50%	$X^2(2, N = 534) = 13.393, p = 0.001$
OU systems, policies, rules and processes	18.10%	22.70%	11.80%	$X^2(2, N = 529) = 14.529, p = 0.001$
Building your study skills	15.70%	17.60%	13.10%	$X^2(2, N = 534) = 11.535, p = 0.003$

TABLE 3 Open comments referring to barriers.

Barrier category	Theme	Coded references	Example
Environment	Negative life circumstances	139	'COVID and having to shield, not having seen my family outside of my partner since February. It's all felt very isolated,' 'Emotional abuse, getting kicked out, having to work so many hours,' 'My 'day job' workload; my younger sister was diagnosed with terminal cancer, and the general impact of coronavirus-having to look at redundancies for staff etc.'
	OU systems	15	'not receiving my textbooks weeks after my course has started,' 'long delay in hearing about the exam arrangements'
	People	36	'My family at home have caused problems with my mental health as they have been critical and unsupportive.'
	Spaces, isolation	26	'It can be very lonely and isolating when distance learning.'
Skills	Confidence and identity	11	'Comparing my performance to other students.'
	Social skills	6	'I find it almost impossible to engage with my peers through the forums or participate during tutorials. Even though I might have ideas and be able to contribute to a discussion I cannot bring myself to draw any attention to myself. It's hard to just email my tutor if I'm struggling. This is nothing to do with them, or any aspect of the OU, it's just my anxiety is appalling.'
	Study skills	13	'I found using the computer system for submitting work stressful at times. This due to my lack of knowledge regarding computers'
Study	Assessment, deadlines, feedback	70	'Pressure of exams,' 'The fear of failing my assignments,' 'the essay questions have been very vague with vague guidance and it has caused a lot of stress trying to work out exactly what is required,' 'Find assessments very stressful,' 'deadlines had negative impact,' 'struggle with reading assessment feedback, good or bad can be triggering'
	Curriculum	59	'I find that I'm not able to keep up the pace with the suggested deadlines of topics in the modules and that causes me a great deal of distress.'
	Tuition	52	'My last tutor for my final year was quite absent and not particularly supportive when I struggled with my project.'

'well' or 'very well' and 11.6% ($N = 34$) saying 'badly' or 'very badly' [$X^2(2, N = 497) = 20.918, p < 0.001$].

4.5. Suggestions for changes

Students were asked an open question about 'things you would like the OU to do to support students' mental wellbeing in studying.' 162 students (28%) gave a response to this question. These were coded in NVivo and clustered into themes, using Braun and Clarke's Thematic Analysis as a methodology (Braun and Clarke, 2006). These free text responses resulted in 264 references coded to 77 different codes, clustered into 12 themes under five overarching categories:

- Study-related changes ($N = 87$)
- Environmental changes ($N = 95$)
- Changes or improvements to support ($N = 61$)
- Skills-related changes ($N = 1$)
- No changes suggested ($N = 20$).

Figure 5 shows a visualisation of themes within these categories, and selected examples are explored in more detail in the following section.

'Study-related changes' contained sub-themes relating to assessment and feedback, curriculum, and tuition and tutor support. The most populated theme was 'tuition,' with 47 coded references. These included suggestions to improve tutor support, such as:

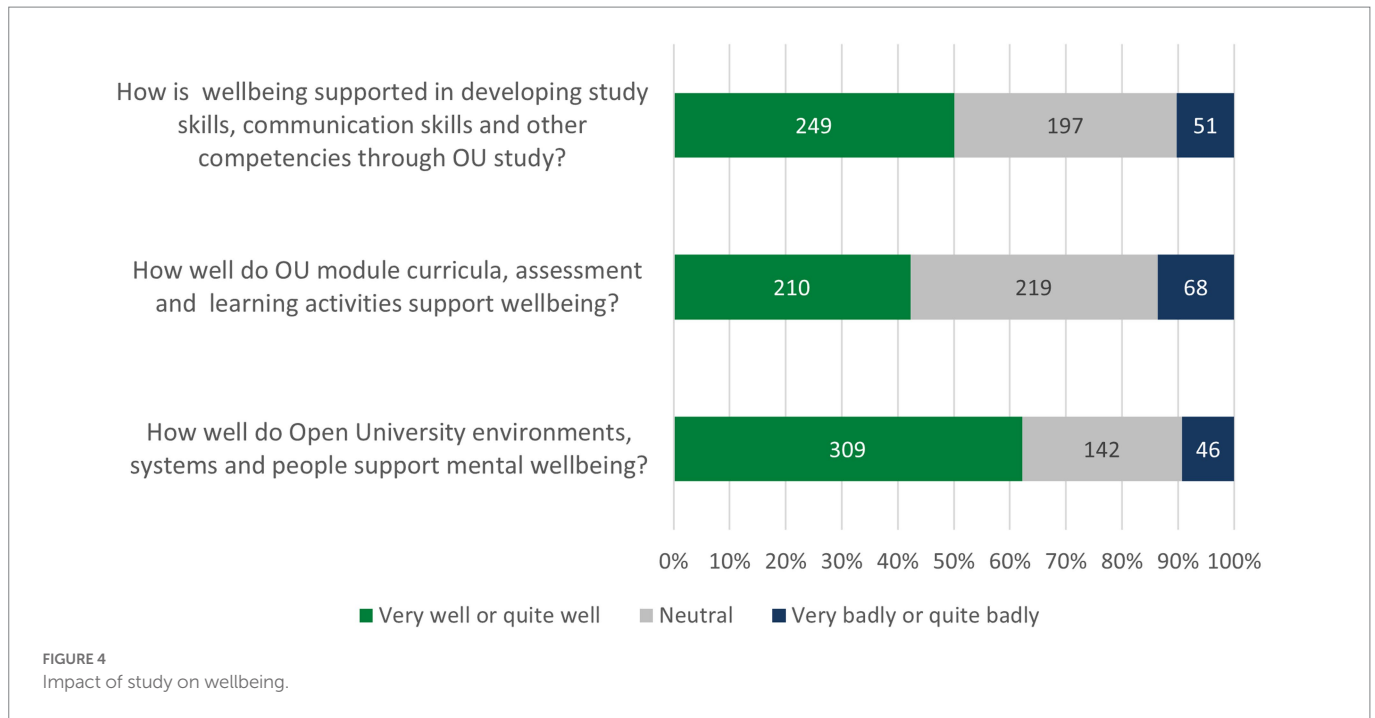


TABLE 4 Survey findings: enablers by age.

Category	Overall %, all students	Under 25	26–45	Over 46	Chi ²
Assessment on modules	37.19%	27.20%	35.80%	45.20%	$X^2(4, N = 562) = 11.740, p = 0.019$
Life circumstances	34.85%	26.60%	32.30%	43.10%	$X^2(4, N = 548) = 11.173, p = 0.016$
Communication skills	40.15%	38.50%	34.30%	48.90%	$X^2(4, N = 548) = 10.703, p = 0.030$
Module content	62.10%	52.60%	58.50%	72.90%	$X^2(4, N = 562) = 20.043, p < 0.001$
Tutor or tutorials	57.30%	50.00%	53.10%	67.60%	$X^2(4, N = 562) = 15.992, p = 0.003$

TABLE 5 Open comment references to enablers.

Enabler category	Theme	Coded references	Example
Environment	Negative life circumstances	1	'Being retired!'
	OU systems, comms and support	33	'Big white wall', 'The student support team. Always available and very understanding', 'DSA mentor'
	People	49	'I feel that my dad and stepmum and mum have been very proud of me which has boosted my self confidence'
	Spaces, distance	30	'A familiar environment while studying has helped'
Skills	Confidence and identity	84	'It makes me feel like my life is "going somewhere"', 'the status of being a postgraduate student instead of a crazy benefit claimant', 'I feel proud that I'm studying and getting good marks. I'm possibly a lot smarter than I think I am. I've more confidence in my own abilities.'
	Study skills	5	'Building skills and giving me something to do at home'
Study	Assessment, deadlines, feedback	32	'The deadlines to ensure I have been keeping on track', 'being reassured with my high marks, helped my anxiety'
	Curriculum	75	'Just the study is a distraction from other problems in my life.' 'Learning new material was exciting. I found the readings and activities very interesting.'
	Tuition	75	'My tutor has been brilliant and the tutorials have helped immensely'

'Have a unified approach from tutors. In my last module I had a fantastic, supportive tutor but some of my peers had tutors who were very unhelpful and it caused them a lot of stress'

Suggestions for changes to curriculum (N = 22) included supporting students to manage distressing content, e.g.:

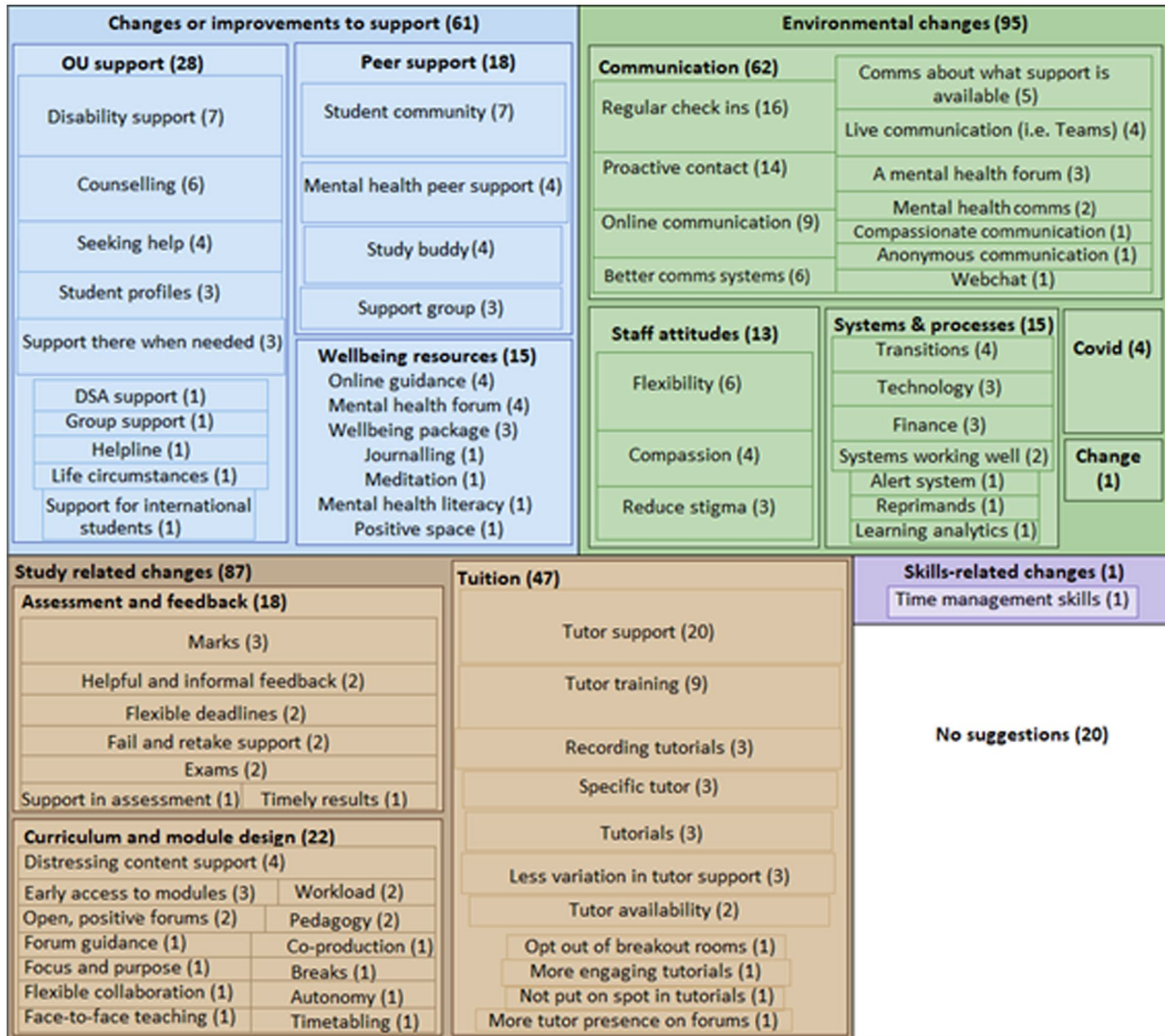


FIGURE 5 Suggestions for changes to university environments, study support and study practices to enhance student wellbeing.

‘Offering trigger warning on potentially upsetting videos or resources.’

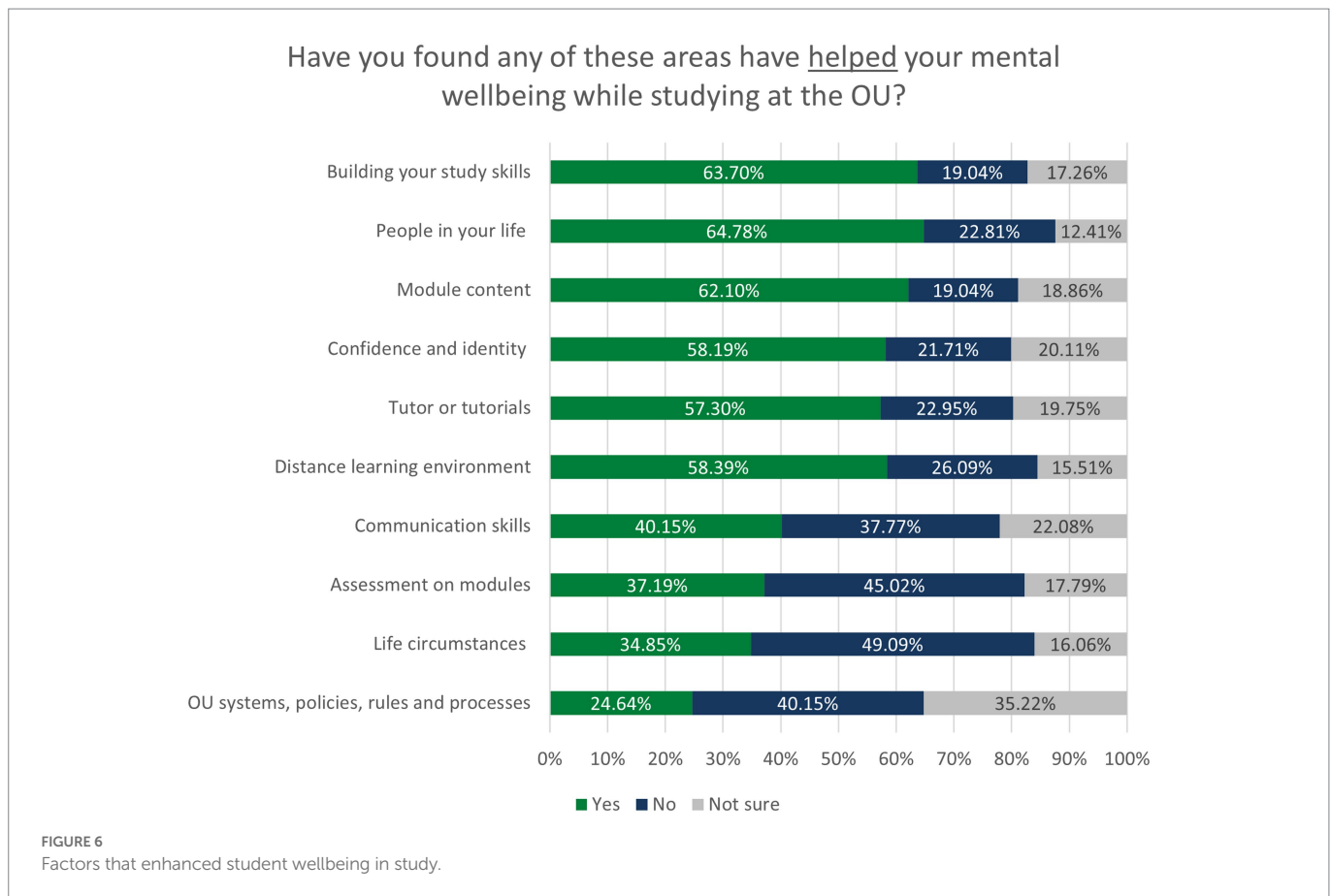
‘The occasional contact by the tutor, ideally by phone, to the student, may pre-empt difficulties and the opportunity to discuss topics that may have, unexpectedly, distressed the student.’

With regard to assessment and feedback (N = 18), students asked for changes to:

- Feedback (i.e., ‘More helpful feedback and more consistent feedback’)
- Flexible deadlines (i.e., ‘Be more flexible with final deadlines and EMAs’)
- Support for failing and retaking (i.e., ‘When I failed an exam I had no support or contact of any kind from tutor or the OU. Better support is needed if we fail an exam.’)
- Exams (i.e., ‘Consider making exams easier to manage for those with mental health issues’).

With regard to environmental changes, a key theme was ‘communication;’ with 62 coded references, this was the most populated theme. Suggestions included regular check ins (e.g., ‘Just check once in a while if students are coping or need more support’) and proactive contact (e.g., ‘Having people to reach out and actively engage with students who are clearly not engaging, not attending, are falling behind or performing poorly so ask them, non-judgementally and without threatening them with expulsion, whether there is any support that they need’).

Another theme under ‘environmental changes’ was systems and processes, with 15 coded references. Suggestions related to transition processes (e.g., ‘Not scaring students when they step up from level 1 to level 2 with a whole list of things which they are supposed to already know - which then later come up in the course. This made me very anxious.’); finance (e.g., ‘I would suggest that they should make more clarification on the Study finances that are available for students.’), and systems working well (e.g., ‘It would be helpful if the tutorial system had stayed the same I e being able to access any tutorials.’) Other themes under ‘environmental changes’ related to staff attitudes (N=13), COVID-19 (N=4) and general change (N=1.)



There were 61 references to ‘changes or improvements to support’. Of these, 28 related to OU support (such as ‘Proactively seek out dyslexic students before their studies begin’); 18 related to peer support (i.e., ‘introduce study buddies to help feel less isolated and connections to others - to improve mental health not for learning/improving study outcomes’) and 15 related to mental health support (such as ‘I support having mental wellbeing resources that students can explore on the website if needed and tutors can refer students there if needed.’)

Finally, there was one ‘skills-related’ suggestion, relating to support developing time management skills.

‘More guidance on how to organise a study timetable for students with jobs that are not a standard 9am-5pm - i.e. how to balance it out but not overload oneself, and give examples of this. It took me years to learn this myself through trial and error, so more guidance would have helped (but the guidance is a lot better now than when I first started anyway).’

4.6. Prioritisation of areas for change

Students were asked how well, in general, they felt their wellbeing was currently supported in three overarching areas:

- OU environments, systems and people
- OU module curricula, assessment and learning activities
- Developing study skills, communication skills and other competencies through OU study

These questions aimed to identify the areas where students felt their wellbeing was less supported, in order to identify priority areas for future solutions. The results are shown in Figure 6.

Very few students felt badly supported. However, the area where students generally felt less well supported was OU module curricula, assessment and learning activities. This implies that action should be prioritised in this area.

5. Discussion

This study aimed to answer the following three research questions:

1. What barriers to mental wellbeing do distance learning students experience, and are particular demographic groups more likely to experience these barriers?
2. What enablers to mental wellbeing do distance learning students experience, and are particular demographic groups more likely to experience these enablers?
3. What changes do distance learning students recommend that would enhance mental wellbeing in distance learning?

5.1. Barriers and enablers experienced

The survey data supports the taxonomy model proposed by Lister et al. (2021), in which aspects of the higher education experience can be either barriers and enablers, depending on their design and how they

are experienced by students. Students stated they experienced barriers and enablers to wellbeing in all the areas of Lister et al's taxonomy, and aspects of the higher education experience can be either barriers and enablers, depending on their design and how they are experienced by students. The survey adds to this model by providing data on the numbers of students experiencing different barriers and enablers.

Assessment is clearly the most critical barrier for students disclosing mental health difficulties, with 71.90% stating this had been a barrier to their wellbeing. This is particularly significant when considered with the findings that students felt their wellbeing was least well supported in the area of module curricula, assessment and learning activities, and strongly implies that action should be prioritised in this area. The open comments show that assessment design, assessment type, deadlines and feedback can cause stress, anxiety, or contribute to barriers to wellbeing. This broadly supports the literature; many studies recognise that assessments are a trigger point for student stress and anxiety (i.e., Galante et al., 2018; Jones et al., 2018; Hill et al., 2019), and that there is a need for assessment practices in HE to evolve, to be more inclusive and less likely to provoke distress (Boud and Falchikov, 2007; Hanesworth et al., 2019). However, some participants found barrier themes to be enablers; some aspects of assessment were found to support or enable wellbeing. Open comments suggest that deadlines could be helpful, and pride in grades could have a positive impact on student wellbeing.

In contrast to assessment, it was interesting that university systems were not perceived to be a barrier or an enabler for many students, ranking second lowest in terms of barriers and lowest in terms of enablers. The few open comments related to particular problems experienced, or additional support received, suggesting that day-to-day systems may be unperceived by students, and not considered to be a barrier or enabler. This contrasts with the literature, where university systems are often seen to be a barrier (Tinklin et al., 2005; Markoulakis and Kirsh, 2013; Coughlan and Lister, 2018).

Overall, the survey revealed insights into the challenges of distance learning and the impacts on wellbeing. The open comments reveal that Covid-19 exacerbated the isolation and stress students felt as distance learners. However, students also reported positive impacts of distance learning as enablers to wellbeing, particularly around building their study skills, the people in students' lives and their curriculum and module content. This aligns interestingly with the literature, which has found learning can have a positive impact on wellbeing, particularly with older adults (Field, 2009; Waller et al., 2018).

5.2. Demographic groups experiencing barriers and enablers

A clear theme emerging from the demographic analysis of data was that while barriers disproportionately affected students disclosing mental health difficulties (and to a lesser extent other disabilities), enablers were experienced more generally, with no significant difference between students with and without disability and mental health disclosures. This supports the contention often found in disability and inclusion literature that inclusive practice benefits *all* students, not just those with disabilities or particular study needs (Male, 1996; Rose and Meyer, 2002; Boyle, 2011; Fovet, 2018; Haynes, 2019; Lopez-Gavira et al., 2019).

The data implies that barriers in general were disproportionately experienced by minority or disadvantaged groups; in particular, students with a mental health condition, students with low socio-economic status, Black or ethnic minority students, and students with a disability other than mental health. Women and younger students were also disproportionately affected. The findings about

women appear to support the general literature, as multiple survey studies have found women more likely to express difficulties with mental wellbeing in study (Bernhardsdóttir and Vilhjálmsón, 2013; Mokhtari et al., 2013; Evans et al., 2018). However, literature about mental health and age in higher education tends to position more mature students as more vulnerable to mental health difficulties (Wong and Kwok, 1997; Swain and Hammond, 2011; Busher and James, 2020), so the finding in this survey that younger students appear more vulnerable was interesting, particularly in the context of lifelong education. It may be that this is a particular feature of the distance learning environment; that distance learning is more challenging for younger students and that this can lead to barriers to wellbeing. It would be interesting to replicate this survey in a face-to-face learning institution, or in other lifelong education contexts, and identify if a similar pattern emerged.

5.3. Changes to enhance mental wellbeing in distance learning

This study also aimed to identify the changes distance learning students suggested to enhance mental wellbeing in distance learning. The most populated theme for suggestions for change related to communications, followed by tuition and tutor practice. This broadly supports the study by Baik et al., in which the highest number of student recommendations for change related to 'Academic teachers and teaching practices,' while changes to communication was the third most popular recommendation (Baik et al., 2019). However, 'Assessment' was of low priority in Baik et al's study, the second-to-least populated, while it was the fourth most populated of twelve themes in this study.

Another interesting finding from the open question on suggested changes was the lack of focus on changes to students' skills. There was only one suggestion to improve skills, compared to 87 suggestions for study-related changes, 95 suggestions for environmental changes and 61 suggestions for support-related changes. This contrasts sharply with the literature, much of which focuses on skills building as a way to build resilience and manage mental health (Hewitt and Stubbs, 2017; AMOSSHE, 2018; Barrable et al., 2018; Holdsworth et al., 2018). Referring back to the capabilities approach (Nussbaum, 2000), the skills-based solutions represent building internal capabilities, while the environmental, support and skills-related solutions suggest changes that facilitate external capabilities. It appears that the broader literature in the sector is more likely to perceive solutions require effort from the students in building internal skills and resilience. However, students appear to take the view that solutions should come from staff and the university in terms of changing practice, offering additional support and supporting external capabilities. It may be that both parties are to some extent shifting the burden of change to the other party. This concept should be explored further in a future study.

5.4. Limitations

There were limitations to this study. This study sought student voices, meaning the voices of Open University staff were missing, although staff voices were prioritised in an earlier phase of the overall study (Lister, 2021; Lister and McFarlane, 2021). Furthermore, low

response numbers were received from certain demographic groups, such as Black or ethnic minority students, meaning their experiences are not adequately represented, their voices not sufficiently heard. Another limitation was (as with any survey) the participants were self-selecting, and this resulted in a volunteer bias where a larger number of students with mental health issues responded to the survey.

6. Conclusion

This paper has presented the findings from a survey sent to 5,000 students to identify barriers and enablers to wellbeing and ideas for change. This study challenges individualistic models of student wellbeing by identifying that assessment practices represent significant barriers to student mental health, and advances previous knowledge in this area by identifying enablers to wellbeing in building study skills, and in curriculum and module content. A clear message for educational providers, especially distance learning institutions, is that assessment strategies and practices should be prioritised as an area for action to better support student wellbeing in distance learning.

This study also revealed significant demographic differences in how students experience barriers and enablers and how likely they feel they are to benefit from solutions. Students with mental health difficulties were consistently more likely to experience barriers and more likely to feel they would benefit from solutions. Furthermore, enablers were more likely to be felt consistently by students, regardless of demographics. This sends a clear message to educational providers that prioritising enablers to student wellbeing in study environments and practices may be beneficial for all students, not only those with mental health difficulties or other particular study needs.

This study is one part of a larger project to identify changes that could be made to better support students' mental wellbeing in distance learning environments, study and skills-building. More work is needed to identify solutions that can be embedded in practice, particularly in the area of assessment, to make distance education and lifelong learning more conducive to student mental wellbeing.

Data availability statement

The datasets presented in this article are not readily available because this data is confidential and as such is not openly shared. Anonymised data may be available upon request. Requests to access the datasets should be directed to klister@arden.ac.uk.

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Ethics statement

The studies involving human participants were reviewed and approved by The Human Research Ethics Committee, Open University. The patients/participants provided their written informed consent to participate in this study.

Author contributions

All authors contributed to the survey instrument design and writing this paper. All authors contributed to the article and approved the submitted version.

Funding

This project was internally funded through the Open University Quality Enhancement and Innovation fund.

Acknowledgments

The authors would like to thank the students who took part in this study. Particular thanks are due to the students who took part in the pilot of the survey and generously contributed suggestions for changes to wording, style and structure.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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OPEN ACCESS

EDITED BY

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SPECIALTY SECTION

This article was submitted to
Educational Psychology,
a section of the journal
Frontiers in Psychology

RECEIVED 09 November 2022

ACCEPTED 30 January 2023

PUBLISHED 16 February 2023

CITATION

Hamilton LG and Petty S (2023) Compassionate pedagogy for neurodiversity in higher education: A conceptual analysis. *Front. Psychol.* 14:1093290. doi: 10.3389/fpsyg.2023.1093290

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Compassionate pedagogy for neurodiversity in higher education: A conceptual analysis

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The neurodiversity paradigm challenges pathologising accounts of neurodevelopmental differences, including autism, attention deficit disorder (ADHD), dyslexia, developmental language disorder (DLD) and others. From a neurodiversity perspective, these differences in the way people perceive, learn about and interact with the world are conceptualised as naturally occurring cognitive variation, akin to biodiversity in the natural environment, which may bring unique strengths and challenges for individuals. An implication of this approach is that interventions designed to create contexts in which neurodivergent people can thrive are needed, in addition to those that seek to ameliorate individual-level difficulties. In this conceptual review, we consider how higher education can offer a context in which cognitive diversity can be noticed, welcomed and accepted with warmth. In universities, neurodiversity is one dimension of difference within an increasingly diverse student population, which overlaps – but is not synonymous – with disability. We argue that improving experience and outcomes for neurodivergent students should be a priority for universities aiming to produce graduates equipped to tackle the complex problems of contemporary society. Drawing on the foundational principles of compassion-focused psychological therapies, we consider how compassion can be enacted within interpersonal interaction, curriculum design, and leadership culture in universities. We apply the insights of double empathy theory to the problem of overcoming barriers of difference in the classroom. Finally, we make recommendations for Universal Design for Learning (UDL) and strengths-based pedagogical approaches, which create a fit-for-purpose educational environment for the widest possible range of learners. This realignment with the neurodiversity paradigm offers an antidote to bolt-on provisions for students who differ from the neuro-normative, and might enable neurodivergent thinkers to flourish within and beyond higher education.

KEYWORDS

neurodiversity, higher education, compassion, double empathy, Universal Design for Learning

1. Introduction

In recent years, widening access to higher education in the United Kingdom and globally has created a larger, more diverse student population (Calderon, 2018; Higher Education Statistics Agency [HESA], 2022). Neurodiversity is a dimension of difference that has received relatively little attention in the higher education pedagogical literature, despite there being increasing numbers of neurodivergent students attending university internationally (Pino and Mortari, 2014; Bakker et al., 2019). Neurodiversity can be understood as naturally occurring variation in the ways that humans perceive, experience and interact with the world,

encompassing neurodevelopmental differences such as autism, attention deficit disorder (ADHD), dyslexia, developmental language disorder (DLD), dyscalculia, and developmental co-ordination disorder (DCD) (see Dwyer, 2022 for a discussion of more or less inclusive definitions of neurodiversity). Robust data on outcomes for neurodivergent students in higher education are not currently available; however, existing studies indicate that wellbeing and employment outcomes tend to be poorer in this population in comparison with their peers (Anderson et al., 2017; Allen and Coney, 2019; Bayeh, 2022).

In this conceptual analysis, we draw on psychological understandings and applications of compassion to consider how universities can support neurodivergent thinkers to thrive. Cognitive diversity is essential in the search for solutions to the complex problems facing the world (Sulik et al., 2021), and therefore universities must prioritise improved outcomes for neurodivergent students. We propose that this can be achieved by adopting compassionate pedagogies, including universal design for learning and strengths-based approaches (Gibbs, 2017; Elsherif et al., 2022). Neurodivergent students, like all students, deserve fit-for-purpose learning experiences, and should not hold responsibility for educating their educators about their differences. The structures and policy context of higher education can act as a disincentive to personalised learning and teaching (Waddington, 2017). Nonetheless, compassion-informed pedagogy, in which educators actively recognise the particular struggles that students face and seek to mitigate them, can be transformative for neurodivergent learners.

2. Neurodivergent students at university

Obtaining a clear picture of outcomes for neurodivergent students at university is complex, not least because many do not disclose their diagnosis, and others may not have a formal diagnosis when they commence their studies (McLeod et al., 2019; Clouder et al., 2020). Evidence to date, which often relates specifically to autism, dyslexia and/or ADHD, suggests that academic attainment can be good, if students are well supported to complete their studies (Richardson, 2009; Fabri and Andrews, 2016; Richardson, 2017). However, attrition rates are relatively high in this population, with poor mental health being just one of many contributing reasons (Van Hees et al., 2015; Ghisi et al., 2016; Griffiths et al., 2019).

It is not difficult to imagine some of the contextual factors that underpin poor retention of neurodivergent students, some of which are discussed here. First, the 'hidden curriculum' at university – that is, the unwritten, and sometimes unintentional, institutional expectations of how students will behave, study, and interact, which are not explicitly taught – tends to exclude minoritised groups from reaching their potential (Sulaimani and Gut, 2019). Second, neurodivergent students often come to university with a negative schema of education following their experiences at school (Lithari, 2019; Mesa and Hamilton, 2022a,b). Experiences of non-accepting environments in earlier education can have long-lasting impacts, and can contribute to a negative sense of self, affected wellbeing and reduced quality of life for older students and adults (Hong et al., 2016). Third, considering some of the specific challenges for neurodivergent students, the near total reliance on written forms of assessment in

many degree programmes is a disproportionate barrier for dyslexic students (Jacobs et al., 2022). ADHDees may find managing independent self-study and processing critical feedback particularly difficult (for an overview of rejection sensitivity in ADHD, see Bedrossian, 2021). For autistic students, achieving a sense of belonging in the university community may be a key challenge: social situations can be overwhelming but unavoidable, and socialising in different ways with peers can attract bullying or result in feelings of loneliness (Bauminger et al., 2003; Gurbuz et al., 2019). Students often mask their differences, by suppressing natural neurodivergent responses and/or learning and imitating 'neurotypical behaviours' in an attempt to avoid negative responses from others. Masking difference can lead to exhaustion and burnout, disconnection from one's identity, and psychological distress (Pearson and Rose, 2021).

We suggest that current educational contexts largely illustrate a conditional view of an acceptable student, i.e., a student is acceptable only when fitting to a neurotypical standard. Difference is often construed as negative, and only rarely understood as demonstrating novelty, originality or excellence in academia. For many neurodivergent students, experiences of personal confusion, navigation of multiple identities and labels through which to view themselves, and experiences of bullying and marginalisation, are all threats to holding a robust, compassionate view of the self within a university environment. Understandably, students often assume high personal responsibility for trying to make a success of their education. Many neurodivergent students describe having to act as self-advocates in order to make others understand their difference, which can contribute to disenfranchisement from university communities (Fabri and Andrews, 2016; Elias and White, 2018).

3. Contextual approaches to neurodiversity

Research into autism and other neurodevelopmental differences is undergoing a paradigm shift, away from medical models and towards neurodiversity approaches (Dwyer, 2022; Pellicano and den Houting, 2022; for alternative perspectives and critiques of the neurodiversity paradigm, see Nelson, 2020; Singer et al., 2022). One key limitation of the medical paradigm in this field is its narrow focus on the individual as the unit of study, with the aim of identifying and ameliorating deficits. In contrast, research from a neurodiversity perspective foregrounds the person-in-context; *impairment* at the individual level is acknowledged where it exists, but *harm* associated with impairment is seen as a function of the interaction between the person and their environment (Singer, 2017; Chapman, 2021). For instance, hyperactivity may be harmful for a child in a school with strict rules on sitting still in class, but harmless for that same child participating in an outdoor education class. It follows that interventions targeting the contexts in which neurodivergent people live, study and work are needed, in addition to existing interventions aimed at improving skills (or, more controversially, modifying behaviours) in individuals. Higher education is one such context, where structures, processes and pedagogies can be designed to be more inclusive for neurodivergent students and staff.

The social environment is central to any educational setting: learning depends on the interactions that take place between the student, their peers, academic and professional staff. Here the double

empathy problem (Milton, 2012) is pertinent. The double empathy problem refers to the reciprocal deficits in understanding that can occur between people who hold different norms and expectations of each other. Where communication preferences and sensory sensitivities vary across neurotypes, this problem can be particularly pervasive. A growing body of experimental research supports the premises of the double empathy problem; for example, neurotypical people are quick to form negative impressions of autistic people on the basis of scant information (Sasson et al., 2017). Furthermore, certain types of communication, including information sharing, can be more successful within same-neurotype than cross-neurotype pairs (Crompton et al., 2020). When people see the world from different perspectives, insight and compassion into each other's difference is more helpful than assuming that one experience is normative, while the other deviates from the norm.

In order to overcome double empathy barriers in the classroom, as educators we must reflect critically on our assumptions and practice. This could mean consciously avoiding the interpretation of students' behaviour from a default neuro-normative perspective. What could be the underlying reasons for a student keeping their eyes closed in class, or taking their seat at the last moment rather than queuing or conversing with peers? It could involve examining where our own knowledge of neurodiversity comes from and critically assessing the potentially stigmatising assumptions that we hold. Carefully considering the language that we use when discussing difference can be powerful in creating a more neurodiversity-inclusive learning environment. Avoiding the language of pathology (e.g., symptoms, comorbidities, high/low functioning) in favour of more neutral alternatives (e.g., characteristics, co-occurring considerations, individual abilities or support needs) is a simple modification that can have a meaningful impact on students' sense of place in the classroom, and in turn, how the education community of peers and staff make sense of difference (Bottema-Beutel et al., 2021). There is good evidence, at least in the Anglophone world, that many autistic people prefer identity-first language (e.g., autistic student) over person-first language (e.g., student with autism), which can imply that the autism is separable from the person (Kenny et al., 2015; Taboas et al., 2022; see Buijsman et al., 2022 for different terminology preferences in a Dutch sample). Analogous identity-first terminology for other neurodevelopmental differences is not yet clear or settled, but the language of neurodiversity is constantly evolving. Initiating open dialogue with neurodivergent students about their language preferences can help to mitigate the double empathy problem in the classroom.

Unfortunately, in order to access educational support at university via disability services, students often have to use the terminology of the medical model, emphasising their diagnosis and deficit and downplaying their strengths. Negotiating this dual reality is a current tension for many neurodivergent students, which signals the need for change towards universal design approaches. Implementing the insights of the neurodiversity paradigm in universities means going beyond simple adaptations or add-ons to current practice (Petty et al., 2023). Currently the onus is too often on neurominority students to find a longer way around to meet neuro-normative expectations. To transform practice, learning and teaching must be designed for a neurodiverse student body, and learning contexts created in which neurodivergent students are seen, understood and enabled to thrive. Here, educators can harness the potential of compassionate pedagogy.

4. Learning from applications of compassion in other fields

Various definitions of compassion exist in the psychological and philosophical literatures. Most share two key components: (1) the propensity to notice suffering in oneself and others (*all* others, regardless of minority status) without negative judgement and (2) the motivation to act to prevent or alleviate suffering (Halifax, 2012; Gilbert, 2019). Nussbaum (2001) emphasises both its cognitive, evaluative nature and its teachability; we learn compassion through experience with diverse others (in real-world interactions and in simulated, fictional social worlds) and subsequent reflection on those experiences. In Nussbaum's conceptualisation, a prerequisite for compassionate responses to another's humanity is the acknowledgement of one's own human vulnerability.

Concepts of compassionate others, compassionate memories and compassionate spaces underpin many psychological therapeutic practices, notably within compassion-focused therapy (Gilbert, 2007). For example, a client experiencing high anxiety and shame might be encouraged to explore early memories of these emotions, to notice where judgements and expectations from others caused a sense of threat, while working therapeutically to harness the soothing potential of compassion. This work might encompass memories from early education of being seen as 'naughty' or 'stupid.' Neurodivergent clients in particular may recall being told that they are not behaving like their peers, that they are not trying hard enough, or may have had their failings repeatedly highlighted by educators. Familiar stories are of not fitting in at school and not being 'good enough' as they are. Cumulative past experiences evoking feelings of threat and shame incentivise masking behaviour (e.g., suppressing stimming, forcing eye contact, copying others' behaviours) which is increasingly recognised as a driver of poor mental health in neurodivergent people (Miller et al., 2021).

For a person to feel compassion for self and others, they need access to compassionate memories, i.e., memories of an interpersonal interaction with another who is warm, non-judgmental, sensitive to and tolerant of differences. They also need access to 'safe spaces,' places of welcome, belonging and enjoyment (Lucre and Clapton, 2020). These are experienced and consequently become expected. Such memories may be difficult for neurodivergent individuals to bring to mind, given the dominant societal frameworks of deficit and exclusion (Botha et al., 2020). Within psychological therapy there is an increasing focus on encouraging the individual to thrive with difference, *without* intending to treat or reduce the expressions of neurodiversity (McVey et al., 2021); compassion-focused therapies are increasingly indicated for neurodivergent clients (Robinson, 2018). This approach can serve as a useful model for education.

Important tenets of compassion in psychological therapy include warmth from the self to the self, and warmth from others (Gilbert and Bailey, 2000). In contrast, an attack and counter-attack dynamic can be at play for neurodivergent students, whereby feeling misunderstood causes them to respond with annoyance or withdrawal from the education system. 'Winning,' or asserting their learning needs, for the more proactive students will not necessarily resolve the difficulties according to concepts of compassion, because warmth and support are missing. Furthermore, self-compassion requires a desire to grow, to look forward with hope for success and to build on positive attributes of the self. Neurodivergent students' self-belief and ambitions for

employment post-graduation are often challenged by negative experiences of academic discrimination (Cheriyana et al., 2021). Within schools and universities, where being neurodivergent often makes you a more ‘troublesome’ student, thriving is typically curtailed, with negative implications for future hopefulness. Implementing concepts from the foundational underpinnings of compassion-focused therapy (Gilbert, 2007) in educational contexts holds promise, if institutions can establish a shared intention to include all students and recognise the mutual benefits that arise from doing so.

We can borrow practical recommendations from other sectors, which are revising their ways of working collaboratively with neurodivergent clients, to develop the quality of our interactions in higher education. Maddox et al. (2020) have drawn attention to the barriers and facilitators to therapeutic working that tend to be put in place by clinicians, care coordinators and service managers within healthcare settings. Their recommendations for clinicians working with autistic clients include: clearly explaining what clients can expect and what is expected of them; establishing mutual understanding of what is being spoken and what is being implied; providing structure for in-person sessions and independent tasks; and considering ways to limit time spent in crowded, brightly lit, or noisy spaces, such as waiting rooms. Considerations for different neurodivergent client groups include the use of planned breaks and switching between tasks to avoid prolonged attentional demand or too-challenging stretches of high-priority work (Young, 2012). These good practice guidelines from healthcare can often be transferred to the classroom, allowing the unwritten curriculum to be minimised so that students can learn.

In healthcare contexts, compassionate interactions have been shown to calm, but not sedate patients. Adopting a compassionate approach does not make appointments longer and may reduce long-term patient costs, such as fewer onward referrals and better medication adherence (Trzeciak et al., 2019). If we can adopt similar principles in education, we might expect students to be more relaxed and better engaged, to have less need for supplementary study skills or wellbeing support from universities, to reach closer-to-potential academic achievement and onwards employment. These intentions are currently speculative, awaiting more investment in research.

5. Conceptualising compassion in educational contexts

Educators have a unique opportunity to cultivate compassion within the learning environments that we create. (Note that we advocate for universal compassion, rather than compassion specifically for a minority.) However, the development of compassion and other ‘intellectual virtues’ receive limited recognition as legitimate learning goals in the current higher education climate (Maxwell, 2017). Instead, utilitarian values of competition, choice, independence, value for money and individual achievement dominate in many countries (Sauntson and Morrish, 2010). Waddington (2018, p. 87) argues that, in an era of marketisation, contemporary university cultures in the United Kingdom and elsewhere are often characterised by “subtle, but powerful, competition and striving for prestige and dominance ... [stifling] the conditions in which compassionate pedagogy can survive and flourish.” Creating the conditions for a compassionate learning environment can therefore be highly challenging for educators charged with meeting an array of market-driven targets.

Notwithstanding this uncondusive context in the sector, students, and especially those in minoritised groups, flourish in learning environments in which they feel that they belong and are valued. Similarly, educators are empowered to create compassionate learning environments where there is a compassionate leadership culture in universities (Belak and Waddington, 2021). Studies within other organisational cultures have characterised compassionate leaders as: attending to and listening with interest; seeking to understand challenges; empathising; and acting to remove obstacles and obtain resources where they are needed (West and Chowla, 2017). If these behaviours can be enacted by university leaders, a culture is established which values and supports compassionate pedagogies, to the benefit of students and staff.

Hao (2011, p. 92) characterises compassionate pedagogy as underpinned by “a commitment that allows educators to criticise institutional and classroom practices that ideologically place underserved students at disadvantaged positions, while at the same time be self-reflexive of their actions through compassion as a daily commitment.” Social, pedagogical and physical aspects of the learning environment can place neurodivergent students at a disadvantage, which often goes unnoticed. A common theme in the educational experiences of these students is anxiety, triggered by uncertainty of what is required of them in the learning situation, interactions with others inside and outside of the classroom, fear of failure, managing time, perfectionism, and additional causes of stress and fatigue not shared by their peers (e.g., sensory stress), among many other factors (Gurbuz et al., 2019; Clouder et al., 2020). It is important to note that anxiety is not a *characteristic* of neurodivergence *per se*, but rather a likely *outcome* of cumulative experiences, including marginalisation and stigma, through the lifespan. Additionally, employment struggles, financial hardship and co-occurring mental health conditions are vulnerability experiences that differ between neurodivergent and neurotypical peers (Griffiths et al., 2019). When neurodivergence contributes to students feeling anxious in the classroom, learning potential and engagement is seriously curtailed. There are negative implications for attendance, joining in when present in the classroom, sharing activities with peers, and for all measures of academic attainment (LeDoux, 1998; Jones et al., 2019).

Anxiety is in essence a response to threat. In educational contexts, threat can come from pedagogical and organisational practices that encourage students to dwell on their failings, to feel disappointed in themselves, and to doubt their futures (mirroring the threats to self-compassion as conceptualised in compassion-focused therapy; Gilbert et al., 2004). Conversely, education has the capacity to transform the lives of those who have experienced discrimination and oppression (Freire, 2006). A learning environment where difference is accepted and where each student can contribute and find a sense of belonging can reduce threat, foster self-compassion, and elicit more compassionate responses from others. These experiences build banks of compassionate memories of the self in education.

6. What would compassionate pedagogy for neurodivergent students look like?

Implementing the principles of compassion in higher education settings is more complex than in the context of one-to-one therapy. Educators have to balance the needs and interests of multiple

stakeholders; staff workloads are perennially high, and institutional structures and processes tend to be inflexible. Nonetheless, if the challenges posed by the neurodiversity paradigm can be framed as an opportunity to rethink and improve pedagogical practice, this is likely to be to the benefit of all students. In making the following recommendations, we draw on the expertise of neurodiverse, multi-stakeholder teams of students, colleagues and authors (e.g., Spaeth and Pearson, 2021; Dwyer et al., 2022; Elsherif et al., 2022; Farrant et al., 2022).

There is a clear role for university senior leadership teams in improving experience and outcomes for neurodivergent students. Including neurodiversity as a dimension of difference in equality, diversity and inclusion (EDI) reviews and initiatives is an important starting point (Dwyer et al., 2022). Any campus-wide review, investment and enhancement activity should be driven by neurodivergent staff and students in collaboration with neurotypical allies. Since experiences of discrimination, stigma and bullying contribute to poor educational outcomes for neurodivergent students, investment in university-wide training in neurodiversity is warranted to the same extent as other campus-wide EDI training. Representation matters for student belonging and aspiration; human resource leaders can therefore ensure that hiring practices are neurodiversity-inclusive, and that neurodivergent staff in the university community are appropriately supported to fulfil their roles and progress to leadership positions. In planning for the development of campus estates, leaders can consider the sensory environment (e.g., adjustable lighting, seating selections, noise and heat levels, accessibility of quiet spaces to all members of the university community). Leaders in professional service roles can design student support services that are joined up, transparent to access and simple to navigate to reduce the self-advocacy burden on students. Providing services based on need, rather than disability diagnosis is recommended, and neurodiversity-affirming mental health support services are particularly important (McVey et al., 2021; Chapman and Botha, 2022; Petty et al., 2023). Finally, investment in transition support programmes into and out of university can impact retention of, and graduate outcomes for, neurodivergent students (Moriño and Biagiotti, 2022).

For academic staff working directly with students in the classroom, a compassion-informed approach requires that we notice distress (e.g., in relation to sensory stress or high anxiety), actively listen to neurodivergent students, are curious and empathic in our response (mindful of implicit biases and double empathy barriers), and work together with students to allow them to feel that they belong in, and can contribute to, the learning community. It is important that educators are alert to the possibility that neurodivergent students may be masking differences or difficulties, and provide alternative ways for them to communicate their needs to maximise their learning. Useful questions for educators to ask include: How much choice is there for students to demonstrate a range of skills and capabilities? How is this student learning about themselves in a way that is not deficit- or problem- focused? How is their experience in this class contributing to an accumulation of safe and positive memories of themselves in education?

In addition to noticing distress, compassionate educators notice strengths and can harness these to scaffold students' engagement and learning. For example, a student with strong attention to detail might be assigned a role of leading on the data analysis of a research project,

monitoring adherence to checklists, protocols or assessment briefs, or finalising presentation materials in a group project. Building in flexibility to assessment schedules could, for example, allow a student with high social anxiety but strong information technology skills to demonstrate their learning in an animated video as an alternative choice to a live presentation in front of an audience. Diversification of assessment types through the course of a programme of study provides all students with opportunities to excel. While narrowly prescribed ways of working are still common in many jobs, increasingly employers are recognising the value of hiring neurodiverse teams and accommodating communication differences (Krzeminska et al., 2019). Universities can do the same. Similarly, allowing for a variety of communication channels between staff and students (e.g., class discussion forums, direct messages or text-chat, in-person tutorials) accommodates communication differences and allows all students to feel part of a learning community. Students should be empowered to make personal choices about their studies that are enabled by the education infrastructure.

Designing learning to reduce anxiety would involve minimising ambiguity at all levels: ensuring materials are available in advance, utilising exemplars where appropriate, and responding empathetically to requests for clarification, as misunderstandings will almost certainly be a shared responsibility. Expectations of students would be made clear and fully explicit, for example by agreeing a class contract at the beginning of a course of study, which can be particularly helpful in reducing hidden curriculum barriers for neurodivergent students. Regularly highlighting the relevance of course content to learning outcomes (i.e., constructive alignment; Biggs, 1996) supports engagement and management of 'information overload.' As educators we can continuously reflect on the accessibility of our own communication, aiming for maximum clarity, concision and informativeness. Where non-literal language such as metaphor or sarcasm is used, are we providing alternative ways for students to access meaning? Are we allowing adequate time for students to process verbal instructions in the classroom, and/or supplementing with written instructions?

Important concepts of compassion include self-care, empathy and distress tolerance (Gilbert, 2007). We can learn from research that has explored ways in which neurodivergent people have described their fit-for purpose, personal ways of coping with stress and distress (Young, 2012; Bearss et al., 2016; Petty et al., 2022). To increase tolerance of distress, is a student able to modify sensory stimuli as the norm, for instance by wearing ear covers? If the physical classroom environment causes sensory stress, is there scope for students to complete tasks in a quieter environment and use online networking to check in through the class? Attendance at in-person classes is often lower in neurodivergent than other student groups for a variety of reasons; self-care might require a student to temporarily withdraw from interactions with other people. Hybrid or blended delivery could be effective in allowing students to continue to access their courses during such periods (Singh et al., 2021). More important, perhaps, is to meet students where they are in terms of attendance and increase accessibility of classroom learning in consultation with them. This could include reducing attentional demands by presenting information in small chunks, building in regular breaks, finding opportunities for movement where possible, or modifying seating arrangements (Honeybourne, 2018). These recommendations reflect personal accounts of coping with distress from neurodivergent people; their

implementation may reduce disadvantages associated with being in a neurominority, while maintaining the ability to receive education.

7. Universal design for learning

Many of the recommendations in the preceding section align with the principles of Universal Design for Learning (UDL; [Rose et al., 2006](#); [CAST, 2018](#)). Fundamentally, UDL is an antidote to bolt-on provisions for students ‘with issues,’ who are not always well served by overworked staff and systems ([Williams, 2019](#)). Current support tends to operate on a ‘disability services’ model: assess and diagnose the student; individualise a learning support plan; add in adjustments to core teaching. This model is, perhaps unintentionally, underpinned by deficit thinking. Funding-specific support relies on diagnostic labels, necessitates onerous and lengthy processes, and places an onus on the student to advocate for accommodations. While seeking support for learning, a process which can take several months, a neurodivergent student is likely to experience a poor person-context fit at university, and may escalate from one source of support to the next while appropriate interventions are not available ([Lightner et al., 2012](#)). It is important to note that, within these structural constraints, individualised support *via* disability services can be compassionate and neurodiversity-affirmative.

As an alternative to bolt-on accommodations, we propose UDL as a compassionate pedagogy. A UDL approach to curriculum design embeds flexibility and choice in order to make learning accessible to the widest possible range of students. Within this framework, information is represented in multiple modalities (e.g., verbal explanations, visual diagrams, written text); students are enabled to express their knowledge in alternative ways (e.g., opt to prepare a written report or an oral presentation); and student engagement is scaffolded (e.g., supporting self-regulation and persistence by giving students autonomy, varying challenge level, choice, and creating a safe learning environment) ([Boothe et al., 2018](#)). The evidence base for the effectiveness of UDL for student outcomes is in its infancy. Existing research suggest that UDL is an effective methodology for improving the learning *process* for all; students undertaking UDL courses report higher satisfaction, greater engagement, and reduced barriers to learning ([Capp, 2017](#); [Soek et al., 2018](#)). Whether effects transfer to improved attainment and reduced attrition is still to be determined.

If curricula are proactively designed for – and in consultation with – diverse learners, it is possible to move away from the reliance on students disclosing their diagnosis and having to self-advocate for individualised support for learning. Such an approach enables universities to become more neurodiversity-inclusive, while reducing demands on over-stretched student support services.

8. Employability and post-university

Before concluding, it is worth considering one of the many impactful outputs of accessible and compassionate pedagogic practice; that is, a carry-forward of positive academic experiences in terms of student self-esteem, hopefulness and preparedness for the workplace ([Kuriyan et al., 2013](#); [Cheriyen et al., 2021](#)). These conditions occur when students find their place and their strengths in educational settings. Importantly, employers are starting to see the competitive

advantage of a neurodiverse workforce and to consider ways to make workplaces more inclusive ([Kirby and Smith, 2021](#)). Overlapping with the application of UDL in education, the following examples of recommended good practice are from accounts of successful employment of a neurodiverse workforce. Recommendations for employers include: offering flexible working hours where possible, considering choice of seating in the workplace, allocating tasks based on employee strengths, explicitly welcoming neurodiversity in the workforce through recruitment and hiring processes, and naming a contact person for consistency and clarity of communication ([Gordon and Fabiano, 2019](#); [Maras et al., 2021](#); [Remington et al., 2022](#)).

Nonetheless, the current disappointing reality for the majority of neurodivergent students is to expect lower likelihood of graduating, accessing postgraduate education, finding appropriate employment that matches their skills and abilities, and enjoying stability in employment ([Scott et al., 2015](#); [Gordon and Fabiano, 2019](#); [Moriño and Biagiotti, 2022](#)). Success in employment builds on an accumulation of positive past experiences, in education and previous employment. In this respect, ‘employability’ holds onto the coattails of educational practices. The techniques discussed through this paper provide ways in which educators can help neurodivergent students to transition their identity to the workplace, notably at a time of anxiety and when delving into a difficult-to-imagine future ([Vincent, 2019](#)). There are ample opportunities to transfer learning of good practice from education through to employment.

9. Discussion and conclusion

Universities and other higher education institutions ought to be an ideal context for neurodivergent flourishing. Studying at post-secondary level allows for increased independence, autonomy and self-advocacy, for example through the opportunity to follow passions and subjects of focused interest; choice over how, when and where to do independent study; increased flexibility of routines; and opportunities to establish new peer groups around shared interests, all within a relatively safe space. On average, university settings likely exhibit greater tolerance of difference than other contexts, both preceding and following higher education. Universities can therefore play an important role in promoting lifelong wellbeing, holistic identity development and skill learning for neurodivergent students. Collectively, day-to-day experiences of interpersonal interactions that model sensitivity, tolerance and kindness, as opposed to misunderstanding and negative judgement, can be personally transformative and lead to improved employment outcomes.

However, we know that not all neurodivergent students thrive at university, and the barriers to thriving are complex. Many experience high anxiety about exposing their difference, within systems and processes that highlight deficit and put the onus on the student to obtain support. The hidden curriculum can disproportionately exclude neurodivergent students. High demands on language, literacy, numeracy, executive functioning and social interaction in university courses pose specific challenges for individuals, depending on their profile of strength and difficulty. Pedagogical practices that are not designed for cognitive diversity inhibit students from developing a sense of competence and belonging in the learning community. Some neurodivergent students may also require enhanced support to successfully negotiate the transition from home to university,

extracurricular aspects of campus life, and the transition from post-secondary education to the workplace, but such support is not universally available. In combination, these barriers can prove overwhelming, with implications for attrition, wellbeing and graduate outcomes.

The neurodiversity paradigm moves the focus for change to contexts, in contrast to the historically dominant medical model assumption that interventions should target deficits in the individual. This shift is beginning to play out in therapeutic, healthcare and educational settings, but there is more work to do. The challenges of educating a neurodiverse student body (and embodying a neurodiverse staff team, through recruitment and mentoring) can be reframed as an opportunity to transform practice. Educators and educational leaders can proactively design courses and systems that are neurodiversity-affirming and neurodiversity-inclusive. At present, pockets of good practice in universities tend to occur serendipitously, rather than as a result of strategic planning. Considering neurodiversity as a dimension of EDI that overlaps with, but is not synonymous with, disability would be an important step towards making university communities more inclusive for their neurodivergent members.

In this article, we have argued that the concept of compassion, as applied in psychological therapies, offers a useful template for educators working with neurodiverse student populations. In practice, this could mean noticing students' distress in the classroom and acting to alleviate it, harnessing individual strengths to increase students' sense of competence, and implementing principles of UDL to increase flexibility in how students access course content and demonstrate their learning. These strategies can help neurodivergent students to build a

positive schema of self-in-education, which can feed forward to post-university settings and reduce the harmful impetus to mask difference. Society benefits from cognitive diversity in myriad ways; we call on university leaders and educators to act to make higher education a more compassionate context for neurodiversity.

Author contributions

LH conceptualised and wrote the first draft of the manuscript. SP contributed to conceptualisation and wrote sections of the manuscript. Both authors contributed to manuscript revision, read, and approved the submitted version.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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OPEN ACCESS

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SPECIALTY SECTION
This article was submitted to
Organizational Psychology,
a section of the journal
Frontiers in Psychology

RECEIVED 30 September 2022
ACCEPTED 19 January 2023
PUBLISHED 27 February 2023

CITATION
Spännäri J, Juntunen E, Pessi AB and
Stähle P (2023) Compassion—A key to
innovation: What promotes and what prevents
innovation in organizations?
Front. Psychol. 14:1058544.
doi: 10.3389/fpsyg.2023.1058544

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Compassion—A key to innovation: What promotes and what prevents innovation in organizations?

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Innovation is crucial for the survival and wellbeing of organizations in volatile, rapidly changing societies. However, the role of profound human capability, compassion, and innovation has not been adequately investigated. This article sets out to explore the factors preventing and promoting innovation in organizations, asking how compassion is connected to these factors, and how compassion could boost innovation. We approach innovation as a complicated multilevel phenomenon, emerging from interactions between individuals and the work context. Our view of compassion includes both compassion and copassion—responding both to the suffering and joy of others. Our material was collected from nine focus group interviews, organized in Finland in 2017, in private, public, and third-sector organizations. The material was analyzed by two researchers, using an adapted grounded theory methodology. We found four core factors capable of either promoting or preventing innovation: (1) the strategy and structures of the organization, (2) resources, especially time, (3) working culture; and (4) the dynamics of interaction between individuals and the community. Our key conclusion, fruitful to theorizing both innovation and compassion, is that for innovation to flourish, compassion is to be cultivated throughout an organization. It is not a single variable or practice, and it is in many ways in a key position regarding innovation: the existence of it promotes innovation, but the lack of it prevents innovation. Thus, organizations aiming for innovation should seek multifaceted understanding and skills in compassion.

KEYWORDS

compassion, innovation, organization, workplace, organizational culture, qualitative study

1. Introduction

Innovation is crucial for the survival and wellbeing of organizations in volatile, rapidly changing societies (see [Bagheri et al., 2019](#); [Mumtaz and Parahoo, 2020](#); [Sharma et al., 2022](#)). Innovation is also a human trait, built into and during the process of evolution ([Reader et al., 2016](#)). But how to recognize, access, and foster successful innovation and innovativeness? How to encourage new ideas for the greater good and for a longer time span, and not only for short-term profit? In particular, what is the role of compassion, which is a deeply rooted human trait, considered by Darwin to be the strongest force in evolution? ([Darwin, 2004](#); [Ekman, 2010](#)).

Many organizations are being confronted by the challenges of finding the innovatory potential of their employees. Technical and structural elements, as well as the social aspects of the work environment, might influence employees' capacity for innovation ([Mumtaz and Parahoo, 2020](#)). Still, we have a very limited understanding of the social, emotional, and motivational factors fostering employees' innovativeness at work ([Bammens, 2015](#)).

In this study, we approach innovation as a multilevel phenomenon (see also [Mumtaz and Parahoo, 2020](#); [Sharma et al., 2022](#)). Employees' innovativeness is a complex process in which innovativeness can be seen to occur as a result of several interconnected factors ([Parzefall et al., 2008](#)). In this study, we are interested in how individual-level and contextual factors, and their synergy, affect employees' innovation in the work context. We analyze factors at the individual, team, and organizational levels. In particular, we articulate why and in what ways compassion may enable innovative behaviors. How might compassion support and foster innovative efforts in organizations?

The key research questions in this article are as follows:

What are the factors preventing and promoting innovation in organizations?

How is compassion connected to these factors?

How could compassion boost innovation?

Compassion at work and within organizations has been researched as being instrumental in, for instance, coaching, *ad hoc* organizing, prosocial behavior during challenging times, and other processes central to developing and transforming organizations. Compassion has numerous proven benefits for organizations. For example, it has been shown to bring about an untapped organizational capability, contribute to fostering a climate of forgiveness, and facilitate the development of social entrepreneurship ([Avramchuk et al., 2013](#)). [Miller et al. \(2012\)](#) have looked at the development of compassion and social reform and entrepreneurship. The research shows that compassion plays an important role in identifying people's suffering, needs, and expectations, as well as in developing new social practices. According to [Miller et al.](#), compassion, above all, arouses and strengthens prosocial motivation, which leads to flexible thinking and commitment to action. All this is crucial to innovation too.

2. Innovation and compassion

2.1. Innovation and innovativeness

Innovation and innovativeness have been the focus of research interest for approximately 30 years. Research has looked at innovation from the perspectives of leadership and management styles, work environment factors, organizations, teams, networks, and individuals ([Scott and Bruce, 1994](#); [King and Anderson, 2002](#); [Hunter et al., 2007](#); [de Jong and Den Hartog, 2010](#)). In this article, we use innovation and innovativeness to describe the vast field of both innovative attitudes and behavior. Thus, we define innovation as both creativity, such as the generation of new ideas and implementation, such as applying new knowledge or improving processes (see [de Jong and Den Hartog, 2010](#)).

Innovative work in the past has often been misunderstood. It has easily been considered only in terms of the development of creative ideas. Creativity is a discernible part of innovative work, but it is also simply one part of innovativeness ([Martins and Terblanche, 2003](#); [de Jong and Den Hartog, 2010](#)). Employee innovativeness goes beyond creativity to include the adoption, production, and implementation of novel and useful ideas ([Scott and Bruce, 1994](#); [Mumtaz and Parahoo, 2020](#)). Innovativeness at work includes actions such as seeking out new ideas, championing ideas at work, and securing funds/planning for the implementation of ideas ([Scott and Bruce, 1994](#)). This type of behavior requires risk-taking and out-of-the-box thinking, and perhaps compassion too, as we explore in this article.

Employee innovativeness is a complicated multilevel phenomenon and is commonly held to emerge from interactions between individuals and the work context ([Hunter et al., 2007](#); [Anderson et al., 2014](#); [Mumtaz and Parahoo, 2020](#)). [Anderson et al. \(2014\)](#) have investigated three broad categories of antecedent variables for innovativeness, namely, individual factors (e.g., personality traits, thinking styles, and motivation), task context (e.g., job complexity and job requirements), and social context (e.g., leadership styles and social networks). Earlier research has also offered a large number of variables as possible determinants of innovation. These factors are commonly divided into four broad categories: individual, job, team, and organizational levels. They all positively influence innovative behavior at different levels, sometimes independently but most often in interaction ([Woodman et al., 1993](#); [Anderson et al., 2004](#); [Shalley and Gilson, 2004](#)). [Parzefall et al. \(2008\)](#) have presented factors that influence employees' innovativeness in the workplace, based on a literature search of 15 peer-reviewed journals (published between 2000 and 2005) and other relevant material, they have utilized the same four levels to classify the factors promoting innovativeness (see [Table 1](#)).

Even though compassion is such a proven asset for teams and workplaces (reviewed in [Section 2.2](#)), here in the list by [Parzefall et al. \(2008\)](#), it cannot explicitly be found. Naturally, the organizational culture and climate, as well as team cohesiveness and trust, will certainly benefit from compassion, and thus further promote innovativeness. However, the need for more specific elaboration remains.

Turning from organizations more toward individuals we would ask, what really sets an innovative individual apart from others? What do they have more of? [Carmeli and Spreitzer \(2009, pp. 173–174\)](#) have noted three crucial conditions. First, when people have an opportunity to learn, grow, and develop at work, they are more likely to identify problems. They also want to solve them and develop new ideas. Learning, in terms of innovative working, means discovering new ways of working and being able to be creative. Second, energy and motivation are important elements in innovation. Energy strengthens the ability to transcend familiar roles and to think and act creatively. Promoting and developing new ideas thus requires energy, as innovation is a proactive search for new technologies, techniques, and processes. It is also often necessary to respond to criticisms and doubts about innovation ([Dutton et al., 2001](#)). Third, positive emotions broaden individuals' repertoires of ideas and actions. Positive emotions broaden thinking, so they can alter cognitive functioning, which in turn affects action and behavior. Positive emotions can increase our intellectual, psychological, and social resources. The three aforementioned factors can play a key role in intrinsic human motivation, which in turn is highly relevant for innovative behavior. As [Vinarski-Peretz and Carmeli \(2011\)](#) state, motivation and commitment to innovative processes increase when people experience psychological safety and meaningfulness and are able to use their own physical, psychological, and emotional resources for the work to be done.

Not all organizations are the same. For instance, [Bysted and Risom Jespersen \(2014\)](#), studying public and private sector jobs in Denmark, Norway, and Sweden, found that in the private sector, innovation is driven primarily by career development, while, in the public sector, it is driven by meeting targets. Public sector employees perceive innovative work as risk-taking. Furthermore, the cultural environment matters, for example, specifically in Finland, innovation is often examined instrumentally, needing justification from an economic perspective (see [Niemi, 2013](#); [Takalo, 2013](#)).

TABLE 1 Factors influencing employee innovativeness at work (Parzefall et al., 2008).

Broad categories	The factors positively influencing employee innovativeness
Individual-level factors	Ability (e.g., has certain cognitive capabilities, expertise, relevant task knowledge, necessary technical skills, and personality characteristics) and willingness
	Being open to new experiences, independence of judgement, a firm sense of self as creative, and self-confidence
	Being willing to try and accept the possibility of failing.
	Having internal force that pushes the individual to persevere in the face of challenges in creative work
Job-level factors	Autonomy
	Clarity of goals
	Lack of routine
	Suitably complex and demanding job
	Sufficient material resources and time
Team-level factors	Team and project-based work
	Deep-level diversity, i.e., diversity in skills and knowledge, or functional diversity is particularly desirable, interdisciplinary teams
	Team cohesiveness
	Good interpersonal relations and the quality of team member exchange relationships
	Trust
	Goal alignment between members
	Reflective orientation
O	Innovation strategy
	Organizational structure
	Organizational culture
	Team/organizational climate

It is, therefore, important that the atmosphere is sufficiently safe and empowering if we want to promote innovative work. Empowerment strengthens the autonomy of employees and the competencies needed for development work. Compassion plays a definite role here, for example, servant leadership fosters intrinsic motivation and a sense of autonomy in employees (Melwani et al., 2012; Paakkanen et al., 2020).

Indeed, in the explorations of innovation, compassion as a concept has to date received far too little attention. However, the phenomenon is not completely absent in the innovation literature. For example, in the context of workplace spirituality (Mitroff and Denton, 1999; Ashmos and Duchon, 2000; Milliman et al., 2003; Kolodinsky et al., 2008), a sense of meaning, belonging, and value-matching—which all require and are promoted by compassion—have been linked to innovative work behavior (Afsar and Rehman, 2015).

2.2. Compassion in innovation

Compassion is generally seen as a multidimensional phenomenon, involving cognitive elements (noticing or being aware of other people's experiences), affective elements (feeling, sympathetic concerns, and empathy), and action elements (responding, readiness to help, acting to ease the suffering, and caring for others) (Kanov et al., 2004; Miller, 2007; Jazaieri et al., 2012; Dutton et al., 2014). There is no single definition of compassion; some notions, for instance, also put emphasis on the intermediate stage of intention to act (Jazaieri et al., 2012). At the core of compassion, there is a focus on the other and the wish for positive changes in their lives (Solomon, 1998; Miller, 2007). Avramchuk (2012) has studied compassion in the healthcare sector. The study found that compassion was constructed at both emotional and conscious levels. The general compassionate process was found to be as follows: a triggering event or circumstance is followed by an emotional experience and then a compassionate act. On the other hand, personal sources of meaningfulness were shown to reinforce the experience of compassion, and thus lead to more compassionate solutions to situations.

The effects and appearance of compassion in organizations have been researched in depth. Here, we look at the fruits of compassion that might come closer, particularly to creativity and innovativeness. Compassion is observed to have a positive effect on the processes of change and development (Smith et al., 2019), as well as in leadership development (Boyatzis et al., 2006). In leaders, compassion has been linked to leadership skills and capabilities, including servant leadership (Melwani et al., 2012). This is also proven in Finnish work culture (Paakkanen et al., 2020). Looking at the employees then, experiencing compassion from superiors has been proven to enhance work engagement, performance, and organizational citizenship behavior (Eldor, 2017). Furthermore, compassion has been shown to alleviate poor workplace climate and to strengthen decision-making capacity (Maitlis and Ozelik, 2004), all needed in creating an environment for innovation. Compassion has also been found to have a positive effect on mutual caring in work communities, as well as on commitment to a work community (Dutton et al., 2006).

Innovativeness is neither just about individuals themselves nor is it simply about organizational structures. Echoing this, we regard compassion in organizations as processual and relational, as well as multidimensional. It is common to think of it as an individual characteristic, and a given individual as being either “compassionate” or “uncompassionate” (Kanov et al., 2004). However, the individual and organizational always mix, and for both levels, compassion is a more practicable talent than a trait. Indeed, individual- and team-level compassion has been shown to have an impact on the initiation of change processes, speeding up work processes, and developing organization-cultural compassion capital (Dutton et al., 2006; Lilius et al., 2011). Understanding the multilayered nature of compassion makes us better equipped to explore the synergy between compassion and innovation.

Compassion literally means “to suffer together.” However, some definitions of compassion, like Boyatzis et al. (2006), focus on encountering others, in various emotions. Thus existing definitions of compassion do not focus exclusively on negative emotions and responding to them. In the workplace too, participating in another person's feelings and living alongside them entails the sharing of pain and stress, as well as joy and inspiration.

To stress this versatility and reflect the full scope of emotions involved in compassion—always needed in creativity and innovation

too—this article incorporates in compassion the novel concept of copassion: the co-innovative, co-creative side of compassionate relationships (Pessi et al., 2022). Copassion refers to an affirmative response to the joy of another. It is rooted in the idea of shared humanity and intersubjectivity—but instead of focusing on sharing and alleviating pain and suffering, it focuses on advancing together, sharing success, enthusiasm, and inspiration (Kanov et al., 2004; Dutton et al., 2006; Miller, 2007; Jazaieri et al., 2012). Copassion, just like compassion too, also involves noticing, feeling, and acting, as well as sense-making (Pessi et al., 2022). This sister phenomenon of compassion is fundamental to innovation. For instance, it involves noticing the novel ideas and innovative potential a colleague might have, wanting to advance these together toward a shared goal, and carrying out the right actions, large and small, to realize this advance. With compassion, an organization is clearly more open to novel ideas, encourages innovation among all of its members, and is more prepared to use new ideas innovatively—in a word, more innovative. Copassion is not only an organizational trait but also a capability that can be strengthened, fostered, and utilized, just as compassion, mentioned earlier. Thus, in this article, we also examine the appearance of copassion when we focus on the connections between compassion and innovation.

As Avramchuk (2011) points out, compassion can be defined in different ways, and research should encompass its varied manifestations in the everyday life of a workplace. Furthermore, we state that in innovation, the copassionate side of coexistence. This concerns all of the three: the individual, the community, and the organization, is crucial. Thus, copassion is vital for innovation. For example, being able to expect your colleagues to share your enthusiasm about a new idea is crucial for summoning up the courage of presenting the idea to others.

Furthermore, the concept of innovation empathy gives us clues as to how compassion and innovation could be linked. In earlier research, as a theoretical construction, empathy has been observed to enhance innovation. The concept of innovation empathy refers to all forms of empathy that are related to how innovators perform in their work. Empathy can be cognitive, meaning the ability to put oneself in another person's shoes. Empathy can also be emotional where it is about sharing feelings. These two components of empathy are intertwined (Montonen et al., 2014). According to Montonen et al. (2014, pp. 370–371), innovation empathy is above all the ability to take others' perspectives into account. Innovation empathy helps to keep the customer's or end user's perspective in mind throughout the innovation process. On the other hand, it is important for innovation facilitators to demonstrate and maintain a climate of empathy, as it creates positive opportunities for the process and outcome: how innovators understand customers' problems and seek to find solutions to them (Davis, 2006; Montonen et al., 2014). In stressing the importance of taking into account customers' positive experience, studies of innovation empathy also underscore the relevance of paying attention to the synergy of copassion and compassion in exploring innovation.

Thus, this article focuses on innovation as a relational phenomenon involving a plethora of viewpoints (such as interpersonal relationships, shared aims, cultures, and processes) rather than approaching innovation as personal solitary achievements. Moreover, we approach this fascinating relational phenomenon by focusing on all of the aforementioned four levels: individual, job, team, and organization. In particular, our interest in this article (not yet in our data collection) then lies in understanding the role of compassion—including copassion—in innovation.

3. Materials and methods

Our aforementioned relational take on innovations constitutes the core reason for our data collection in a discussive setting within organizations. To collect the research material, nine focus group discussions on innovation were organized in Finland in 2017, gathering participants from a wide range of arenas: public sector, private sector, and third sector. To reach the public sector, five focus groups were organized in two smallish (*circa* 10,000–40,000 inhabitants) municipalities, three groups in one municipality and one in the other. They represented a variety of participants. In these public sector focus groups, the participants were not only public sector workers but also local small business owners or their employees, as well as town council members. Then, to reach the private sector, two focus groups were organized in a Finnish multinational pharmaceutical company. These focus groups consisted of both employees and the leaders of the organizations in mixed groups. Finally, to reach the third sector, we organized two focus groups with participants from various third sector organizations. These research sites were chosen among those who displayed interest in the study, and all organizations selected were large enough to accommodate focus groups. Focus group participants were recruited by the organizations internally with an open call.

Each focus group had 3–8 informants. Background information about the participants, such as age or gender, was not collected in the study. But in general, all participants were of working age, and there were both male and female participants in all focus groups. In addition to the groups, two thematic interviews were arranged with key persons of the same pharmaceutical company, as well as the aforementioned municipalities: one interview with two persons and the other with one person. All of the focus group interviews, as well as the individual discussions, were guided using a similar structure and cues (see below), and all lasted between 60 and 120 min. Altogether our research material thus consisted of eight focus groups and three thematic interviews. A total of 46 + 5 informants contributed to the material collection.

To examine our core phenomena as widely as possible and to keep it rooted in the everyday life of the organizations, we decided to use a cue containing elements of not only innovation but also the development of new ideas in general in the particular organization in question. The focus groups were presented with questions regarding innovative workplaces, in general, as well as innovation at their own daily work. This study uses responses to one of the questions: “What are the factors that prevent and the ones that promote the emergence and development of new ideas and innovation at this workplace?” The participants were first instructed to write down, on their own, the factors preventing and promoting, on colored sticky notes, using one color for the promoting and a different color for the preventing factors. After a few minutes of solitary thinking and writing, participants discussed their notes with each group. All participants took part in these non-structured, non-facilitated discussions.

The focus groups were voice-recorded (some also video-recorded) and transcribed into text documents. This material was analyzed using Atlas.ti qualitative analysis software and adapted the grounded theory methodology. Grounded theory is “a set of systematic inductive methods for conducting qualitative research aimed toward theory development.” (Charmaz, 2003).

The grounded theory involves recognizing and building categories (Dey, 2007), adding categories based on theory, and possibly also collecting new data during the course of research as a phase of “theoretical sampling” in the grounded theory methodology (Draucker

et al., 2007). Grounded theory is especially well-suited for novel explorations of phenomena and their relations (Charmaz, 2006), such as this study.

The material was coded first by free coding: themes arising from the material. The material was divided into half, and each half was coded by one of the researchers, and then in the second phase, the codings were double-checked by the other researcher. After the first round of coding and during the whole coding process, the codes were grouped into larger thematic entities, such as ‘values,’ ‘leadership,’ ‘resources,’ and ‘compassion.’ Furthermore, more theoretically based coding—such as codes related to the different levels of innovation—was also added at a later stage. Then, the entire material was additionally coded for factors preventing and promoting innovation, with a purposefully broad scope. A key aim for all of our analyses was first to structure the mass of codes to find key themes in the material. The second key aim was to examine the co-occurrence of various codes at the textual, grounded level.

Two matters must be underlined: relating to our research aim, our data do not consist of facts but rather experiences and feelings; that is, what did the participants themselves consider preventing versus promoting factors? Furthermore, even if our interest lies in the particular role played by compassion and copassion, this issue was indeed not explicated in the guidance at all. Next, we present the results of our analysis, starting from the factors promoting innovation and advancing to the factors preventing innovation, and the emergence of new ideas.

4. Factors promoting innovation and the emergence of new ideas

4.1. Cultural practices at an innovative working community

In the material, the community and its characteristics seemed to be clearly the most influential factor in the emergence of new ideas and innovation. In the material, there were 180 quotations coded with “the work community;” 90 of them were also coded with “factors promoting innovation.” Other themes, such as “working culture,” “leadership,” or “values” generally reached 20–30 quotations connected to the promotion of innovations, so the difference is striking.

The core of an innovative working community seemed to be built around trust (19 quotations). Trust was in the data explicitly connected with openness, collaboration, communication, and sharing, thus promoting the emergence of new ideas from everyone’s point of view.

By first being honest with oneself and the others, we build trust, and then we are capable of open and inspiring interaction. And then we can reach the goals which we believe in and are ready to work for them (9:7).¹

Both community, more generally, and trust are fundamentals that clearly resonate with compassion—including copassion.

The sense of community and belonging was clearly elements of a good and innovative working community (nine quotations), but at the same time, the working community was seen “in action”; that is, people did not always write about a sense of community as such but more about its manifestation in everyday work. Such notions included, for instance, people being inspired together by each other (12 quotations) and by

doing things together (19 quotations). As seen in the number of quotations and mentions, the actual deeds and manifestations of a good working community seem to be essential:

More and more I’ve realized that it’s something we do together, and in a way we can get everyone involved, and everyone plays their own important role in it (7:84).

The working community also promoted the emergence of new ideas in the form of a team, actually more in the form of a sense of a team, and as the support received from team members, as this informant states:

It is also essentially linked to the kind of support you get from others, so that when you can be genuinely what you are, you also get support for yourself (5:99).

Indeed, compassion is experienced to be pivotal here. The quote mentioned earlier also illustrates the key feature of a community: its relationship with the individuals it comprises. According to the respondents, on the one hand, an innovative working community needs the right individuals, but on the other hand, an open attitude to different personalities, even the more challenging ones. Some respondents also mentioned that strong personalities or powerful key figures can be either the strength and backbone of a community or a destructive force within it.

4.2. In between the individual and the community—Shared processes of innovation

In the material gathered, both in individual responses and the discussions, the interplay between individuals—with their own experiences and motives—and the whole community was the central framework for innovation, enthusiasm, and the emergence of new ideas. Compassion and copassion, in particular, are at play, as a base for the creation of a type of organizational atmosphere—something that is at times difficult to pinpoint precisely. The interplay is clearly explicated by the following respondent who works in the logistics department of a multinational company:

(What promotes the emergence of new ideas is) first, of course, your own attitude and thoughts about wanting to change or develop things in general. – – Then, of course, the atmosphere, that you can suggest new things, and then that you get support from your supervisor or colleagues or whoever you are with, so that you can come up with ideas and try something new (27:22)

On a larger scale, throughout the material, the interplay between compassion and copassion was evident, as well as the working culture, values, attitudes, atmosphere, meaningful work, and gains from work. This further validates our approach, which was to examine compassion as a holistic phenomenon: encompassing both compassion and copassion and reaching different levels of an organization.

With regard to the working culture, communication in many of its forms seemed to be essential for innovation and the emergence of new ideas. Good communication and transparency seem to foster inspiration and enthusiasm by creating concrete possibilities to view and develop further colleagues’ new ideas. Compassion specifically played a role here: are we able to encounter each other in a humane way? Even more so, innovations seemed to be linked to compassion, for example, the sharing of and reacting to positive emotions in drafting something novel together and in the sharing of wild ideas. For instance,

it was transparent, making suggestions and initiatives. In the instant somebody typed an initiative on their computer, everybody saw it, the steps in the process, everything. You could see the comments instantly, was it

¹ The numbers refer to coded text segments, ‘quotations’, and are kept here because of traceability to the raw material.

accepted or not, what was the payoff. It fueled enthusiasm: 'Oh, you could make an initiative related to this matter, we also have an idea, why did not I think of making an initiative before.' The whole group got excited, and discussed the initiatives. So transparency is, for me, something. It's good to see what others think, and from that new ideas are born (1:97).

On the other hand, to listen and to be heard, the reciprocal dimension of communication, compassion, and mutual support was underlined in the material—both in the sense of encouraging every member to share their views and in the sense of the discussion as the key process in solving problems and in rethinking ways of acting.

On the contrary, it's probably a good thing that it has a little variation, someone comes along, someone from the outside who has not been there before and listens a little bit and says it out loud what the others do not, sort of wonder (2:185).

How mistakes are handled was also central to creating innovation in the working culture, encouraging further the process of developing new ideas.

In connection with innovation, putting values into action, acting out, and fostering personal values, as well as living out values at the workplace, with colleagues were seen as key factors. Equally important was that work and its aims, and the organizational values would cohere with one's personal values. For instance, respecting mutual helping needs to be shown every day. This was generally considered as affecting the motivation and commitment to innovate and create new ideas, and also the ability to identify with challenges in the field.

Of all the values inspected, openness was by far the most affluent with innovation and new ideas. It co-occurred with increased innovation 18 times in the material, whereas the next biggest value cluster, for example, gender equality was mentioned just twice in connection with increased innovation. An open atmosphere was seen to be essential at the workplace, to enable and facilitate discussion, to permit everyone to contribute, to permit healthy criticism, and to build trust and interplay in general. These two were even seen as the precursors to any innovative actions:

By first being REAL to yourself and others >that's how you achieve TRUST >that's how you can have open and inspiring interactions >that's how you achieve the goals you believe in and are willing to work towards (9:6).

One of the leading arguments was: the more there are different persons, opinions, and views contributing to a situation, the more possibilities for new ideas there are. As this informant explains:

then this openness, openness to appreciate different people indeed, it is also largely related to this kind of hierarchy. We value each link in the chain (1:21).

Openness was also seen as a counterpart to strong hierarchies, which in turn were seen as preventing the emergence of new ideas. Openness was seen both as an intrinsic value as such and also as an aspect and quality of working culture in the everyday practices at the workplace. Furthermore, openness to sharing one's worries as well as joys—the starting points of compassion and copassion—was vividly emphasized.

In general, attitudes were widely present in the material in connection with increased innovation, both as personal attitudes defining the individual's way to work and shared attitudes in the community or workplace. The interplay between these two is evident. In particular, our informants underlined the role of a warm, encountering attitude toward colleagues, both compassionate and copassionate ones. Indeed, the two strongest, most visible, and also most widespread attitude clusters in the material, in general, were: (1) positivity in general

and a positive attitude toward other people and (2) challenging/questioning authority and prevailing norms/practices. Interestingly, in proportion, questioning authority (4 out of 15 quotations) did not co-occur as strongly with innovation as did positivity (17 out of 31 quotations).

The role of positive attitudes in compassion was apparent. For instance, positivity in relation to others and the community—individuals affecting others—was emphasized:

A person who is positive and fair and, like, happy – one who has positive energy – will surely get the others to work their best, too (5:155).

Positivity in relation to the quality of work and innovation was also noted as an eminent promoter of innovation:

A positive attitude to work has an effect - even if the work is difficult and challenging, people want to work with it, not run away or push it aside. People have motivations and enthusiasm to solve problems (1:82).

However, saying 'yes' to everything was not a key to innovation, according to our material. If conducted with respect and in a compassionate, humane spirit having the attitude to challenge or question each other can also play an essential role in the fostering of innovation. Other attitudes contributing to innovation were: a willingness to make one's best effort, seeing the importance of equal treatment for everyone, and justice in the workplace in general. These too powerfully resonate with compassion: valuing each human for who they are; being open to other people's experiences; helping others; and taking others into account.

And listening in general, you do not just listen, you really listen, you are present, so you stop and you really know that I'm listening to what you are saying, so that's a pretty big thing in my opinion.

In general, the atmosphere was experienced to have a huge impact on innovation (10 + 16 quotations), according to our informants, for example, making it possible for all members of an organization to express their ideas and encourage design-thinking. This demands psychological safety and trust in the compassionate approach from colleagues: Do I trust that this is a safe, humane place to share even wilder ideas? Interestingly, our material acknowledged that everyone can affect the atmosphere, and then the atmosphere in turn has an effect on all the members of the community. It was considered that compassion and copassion in everyday life are the responsibilities of each and every member of an organization. This view was explicated, for instance, by one of the corporate leaders participating in the interviews:

The day has to go with a good mood. I sometimes thought that I was the creator of the mood but the people are the creators of the mood, that I have nothing else to do but maybe show a little example of what the mood is but that the people then create it themselves (7:73).

The sense of one's own work belonging to a bigger entity and the notion that the work has an effect on something important in life were evident in the analysis in connection with innovation and grouped as finding meaning in work. Experiencing meaning in work was explicitly connected with motivation:

but perhaps the single most important thing that encourages or possibly discourages innovation, is motivation. Somehow it seems that, in addition to the salary, the purpose of the work you do, – from your own point of view and hopefully also from the point of view of the organization, and in the best case also from the point of view of the customer – is to produce something that you yourself feel is meaningful at some point in the chain. Preferably at all points. If there is one factor missing, the motivation can be quite weak. The salary is probably not motivating after the basic needs are met (27:29).

Innovation and the emergence of new ideas were also connected with how and in what ways daily working life is rewarding. With regard to the crucial benefits of work, the respondents mention personal growth, the satisfaction of inspiring others and helping them learn and grow, and the sheer enjoyment of the work.

If I were to put it this way, I've also experienced that there's a certain growth here. Spiritual growth too. Depending on what you have been through at what stage you have been through, the things that might be objects of joy and things that are satisfying, they come in a different way.

Our analysis suggests that what people perceive as the benefits of their work is largely connected to the impact of work: noticing the impact and seeing the possibility to have an effect *via* work, appreciating it, and sharing the goals and values of the work. This, in turn, would increase the motivation to make changes in the workplace and to benefit from the work even more.

4.3. New ideas as a result of—and promoted by—Organizational qualities: Structures, resources, and bureaucracy

Promoting the emergence of new ideas was also seen as being a result of certain organizational features, such as structures, leadership, goals, and resource management.

When speaking of the structures and organizations that support the emergence of new ideas, the informants used the term 'flexible organizations', referring to a workplace open to change and new innovations where it is easy to cross boundaries and bring forward one's own ideas. Also seen as important were how ideas and initiatives were handled, and whether the organization had any standard protocol to advance new initiatives and feedback.

As promoters, so the leadership has a big role, how to give space for new ideas and give the opportunity to discuss in general. And the functionality of the whole organization: how you handle and act upon initiatives, for example (1:77).

Our material highlights the importance of humane and compassionate organizational structures for innovation to emerge.

The importance of having goals and visions in an organization, and explicating these in the workplace, was one structural feature that was quite pronounced in the material in connection with innovation. Equally important were the goals in the organization that the leader advances logically toward them and is open about them. Furthermore, sharing a goal with colleagues and the organization, in general, was connected to the emergence of new ideas—mainly through motivation to develop further the organization and to see the results.

Leadership was experienced as a part of the structures of an organization, and at the same time, a question of individual behavior manifested, e.g., in leadership skills. The styles and qualities of leadership promoting the emergence of new ideas were distilled into five elements, in particular, leadership that is encouraging, stimulating, honest, rewarding the employees, and equality toward the employees.

Mutual trust is really important. Then when you give feedback, it must always be honest, is it criticism or praise, so always if you are honest so it becomes genuine. Then in fact, managers must feed the strengths of all their staff, they must always pay attention to what someone is doing badly or otherwise, try to guide it in the direction that it uses their own strengths, so you get really good results. Rewarding is a good way to take things forward, but then, uh, for the supervisor so equal treatment for all

employees, so everyone is equal, you can not give someone better feedback, something extra for some things that they are a factor of equality, so it is something like improving the working atmosphere, and then all that competence update training and other factors that promote competence, and then work, a good working atmosphere which others have mentioned (4:130).

Leadership ideas such as a compassionate and servant leadership style were clearly seen in the material as promoting innovation.

The single biggest structural feature and resource that promote innovative behavior and the emergence of new ideas in the material were time—dedicated to innovation. The emergence of new ideas was linked to tranquil moments and 'idle' time or time to pause, giving space not only to individual thought processes but also to bounce ideas around with others.

They always say that you have to have time for it, you have to take time to rest your brain a bit. That's probably why we have a lot of them [ideas] in our free time, because then it's just time. You have to be relaxed enough to be innovative. You stop to think properly about a process. How can you do this now? What do we do about this? Now put everything together. Let us get this right so we do not have to complain about it anymore (27:98).

Also very important are informal, regular get-togethers such as coffee breaks and other circumstances to meet colleagues without a strict agenda—in contrast with organized team building events or recreational days, which take place with longer intervals.

Quite a few of our projects have started from the coffee breaks: Somebody weighs in [with]an idea, and then someone else gets inspired, someone writes it down as a report, and encourages others to check this and that, And soon we have a project going on (2:116).

Our material showed that using time for innovation created possibilities for both compassion and copassion. 'Idle' time not only promoted compassion between team members but also made compassionately visible the humane needs and capabilities of the individuals. For encouraging innovation, the structures regarding time use should be designed with compassion in mind.

5. Factors preventing innovation and the emergence of new ideas

5.1. Cultural practices as barriers to innovation

The barriers to new ideas and innovation that emerged from the data were habits and routines of individuals and communities – habits that were perhaps too strictly adhered to. People are used to working in certain ways, even if the way is no longer effective and efficient. There was not always a willingness to change and reform ways of working and behavior. Some interviewees spoke of resistance to change.

It's not a very fruitful basis for getting something new and inspiring, so usually people will go back to the solutions that have been tried and tested, and go forward with those, because at least they have been reasonably successful with them in the past.

Resistance to change, or reluctance to change in general, was often thought to be due to a lack of understanding of the needs and implications of change. There was too little communication about the need for change and development, and people were not involved in the development process. Ideas often came from the top down, with the management generating ideas and directions for development, without

other levels of the organization being able to influence and be involved at the point of inception.

Some sectors were described as having traditional, work-related, and cultural patterns of working in certain ways. These were professional traditions that were respected and not to be abandoned:

If we are talking about something like a municipal organization, like a care institution. When young people come there, and there are these experienced people involved, so there you are a prisoner of this kind of group, a group with fixed habits. After three days you stop trying to introduce any reforms there. You're crushed and the old ways continue, and the action is still the same. And the young are not happy (3:12).

The interviews also revealed that working in an individual-oriented way or sticking strictly to the boundaries of one's own job description was also an obstacle to innovation. Interviewees described situations where people were not prepared to move beyond their own tasks or to broaden their view of what their own tasks entailed. The boundaries were strictly adhered to.

Individualism is a kind of slowing factor. If everybody is just strictly in their own box, if they take care of just their own domain, it is indeed a slowing factor. We should get the teamwork going on (2:81).

There were a significant number of mentions in the interviews of how the atmosphere and attitudes in the workplace affect innovation. An atmosphere that is stimulating and conducive to new ideas will be undermined by cynicism, ill will, jealousy, and mistrust among people. Some reported experiences of competition within the workplace. A suitable competitive spirit can foster renewal, but competition can also set limits on what people are willing to share, such as their own skills.

5.2. In between the individual and the community—Barriers to shared processes of innovation

Many interviewees pointed out that innovation is undermined by shyness and fear of bringing one's own ideas to the workplace. Many interviewees felt timid about how their ideas are received in work communities. Some interviewees were afraid of being rejected and others of being ridiculed. Some interviewees felt that there was a fear of failure and of making mistakes in the workplace. It was precisely the risk of making mistakes that were associated with new things, as this informant states:

A fear of failure and, for example, if you are really stuck in a certain pattern, perhaps because of time constraints, you just stick to certain routines. And then if you spend so much time on routines that you do not even have time to think about anything else, then that of course hampers innovation (27:20).

Concern, timidity, and fear of brainstorming were identified, as being due to mistrust, a negative atmosphere, and poor team spirit in the workplace. On the other hand, timidity, for example, was perceived as an individual characteristic. Some felt more shy, quiet, and introverted in large groups. The acceptance, support, and encouragement of the group had a significant impact on the ability to express their own thinking.

Some interviewees pointed out that sometimes there are very strong personalities in working groups and teams who take a strong position, use their own voice and dominate common situations and discussions. These strong personalities could be drivers of new ideas,

but they could also undermine the courage of others to share their own ideas or otherwise dampen the views of others:

if there is a lot of brainstorming in the group, if there is a kind of imbalance – if there is someone who is too loud or dominant – it may silence the others in the group (28:17).

Some interviewees mentioned that there are always individuals in work communities who “shoot down” anything related to innovation and change. Individuals could be a major obstacle and blocker to moving ideas forward. At times, personal disputes and grudges could also prevent ideas from moving forward. One example was given from the municipal policy side:

In a small municipality, sometimes even the cottage plot issues can bother some decision-makers. If some of them did not get permit for their own cottage, they will say no to the permits of others, no matter what (2:133).

The dynamics of working groups and teams were considered to be influenced by the motivation and resources of the individual. Shared innovation was not promoted if the person was not motivated or otherwise not invested in community situations:

Just using devices like mobile phones has an impact on the whole atmosphere. If the intention is to come together to innovate something, then you would have to try to find a side of yourself that wants to contribute to it. (27:14).

In other cases, some people just could not cope with or be tired of their own work. A lack of resources was seen as a serious obstacle to creating and developing something new. Several interviewees highlighted the importance of personal wellbeing in innovation:

A barrier can be that if you are somehow bored with the job, you are tired of the work, then you do not have enough resources to think about it in a new way so that you just perform it in the way it is, because the easiest route is to go the same way that has always been done before (4:27).

5.3. Preventive organizational qualities: Structures, resources, and bureaucracy

Most of all, the people involved in the group interviews talked about how different legislation, norms, and guidelines in organizations and society hinder the development of new ideas. Many talked about bureaucracy as being a barrier to innovation. Bureaucracy was something many had encountered in both the public and private sectors. Our study included a private sector organization whose sector was particularly heavily regulated.

If we go by all the standards, there will be no innovation, and no new thinking will be allowed under any circumstances.

So it is perhaps just the general operating environment, laws and rules that prevail in the pharmaceutical industry that sometimes limit the scope for good ideas and thoughts, but if you cannot do it, you cannot do it (28:16).

On the other hand, it was not only the legislation and norms that were seen as problematic but also the strict interpretation of the law in its implementation. Finnish officials were found to have a special obligation to implement the instructions to the letter:

So there will be stricter regulation when the law itself is and then when it is, there is this stricter interpretation, so it happens at some stage that when the law is reformed, the stricter interpretation will be in the new law, that the legislature is originally lighter in this law when enacting, but then when implemented, so we Finns enforce it even more strictly (2:54).

Strict laws, regulations, guidelines, and standards created a very narrow space in which to operate, to create something new, and to do things differently, even if it was found that previous solutions did not work. Bureaucracy was also perceived as a barrier to taking new ideas forward. Bureaucracy introduced a culture of caution and timidity in trying new things. People acted as if their hands were “tied” to fulfill their official duties and not to break the regulations.

But that causes a very cautious spirit in this kind of municipal activity.--- Because then again, if you do something different, someone may complain about it. If the complaint goes through and shows that you treated community members unequally, you lose. And that creates a very cautious approach to anything new and anything innovative (2:60).

In all of the group interviews, there were also some aspects of the organizational structure that undermined the possibility of innovation. The multilayered nature of organizations, hierarchical structures, and the distance of decision-making from everyday work and practices were perceived as problematic. In terms of reform and change, decisions were often taken by people who were not in touch with the practical issues and challenges.

Another key area that emerged as a barrier to innovation was that of resources and in particular the lack of resources of various kinds. The biggest challenge for many people was time. Many people felt that they were so busy that they did not have the time and resources to develop something new. On the other hand, time pressure created a situation where there was no more “idle” time—in this article referring to non-structured and perhaps seemingly non-productive time—to be creative and innovative. The generation of new ideas was seen as requiring free spaces and moments to think, brainstorm with others, and bring together different ideas and thoughts. Many people spoke for change. There used to be more time for sharing in work communities or networks, but now there is too little time for joint brainstorming.

Then I feel hurried. I feel like there's so much to do that I cannot think of everything until the end, if there's a project. What do I want to do. I just do not have time. It's disgusting. Then the processes in here. They limit quite a lot of what you can and cannot do (27:12)

1. Another major lack of resources that several informants referred to was money. Without financial resources, many new ideas cannot be implemented. The lack of financial resources did not foster innovation. Access to information, skills, and training was also identified as resource gap. Access to information was linked, *inter alia*, to difficulties in communicating and interacting with people.
2. *There is not enough planning skill, there is not enough skills to control processes. We're at the point that we run out of skills. Perhaps a pilot was made, but how to proceed? That's the difficult thing. (2:74)*

Some interviewees said that it is a waste of resources not to evaluate and reflect on the work done, and the project or to reflect on, for example, what has been learned and in which areas further development is needed. The way the resources available are used is also an issue. Too little thought is given in work communities and organizations to whether resources are being used in line with objectives efficiently and effectively.

6. Key factors of innovation and their relations to compassion

Above, we have examined the factors promoting and preventing innovation in the organizations we studied. These are summarized in Table 2 below, with promotive factors on the left-hand side and preventive factors on the right-hand side. However, as noted earlier, our informants also revealed the factors that they experienced as playing a part in both preventing and promoting innovations. Thus, the middle column of the table contains the common denominators for promotive and preventive factors.

The core findings of this article are fourfold. First, as shown in Table 2, we found that the factors promoting and preventing innovation have a lot to do with each other. Many of the factors that promote and hinder innovation are positive and negative aspects of the same phenomenon—either the existence or non-existence of it. The strongest drivers and barriers to innovation occur simultaneously in the areas of individual–community relations, communication, and organizational climate and culture. In addition to these core factors, some clear ‘fringe factors’ emerged. These would either need to be eliminated for innovation to flourish (preventive factors) or would be an important booster to be implemented (promotive factors).

Our second key finding is that the common denominators of promotive and preventive factors were: (1) the strategy and structures within the organization, (2) resources, especially time, (3) working culture, and (4) the dynamics of interaction between individuals and the

TABLE 2 Promotive and preventive factors for innovation and their common denominators.

Promotive factors	Common denominators	Preventive factors
-Explicated & shared goals, matching values and action -Just leadership	(A) Structures, strategies & leadership	-Not enough shared goals and actions aligned with them -Rigid structures in organization
“idle” time, time dedicated for innovation and reflection, time for sharing with team members	(B) Resources, especially time	No time to think, no “idle” time
-Positivity, copassion -Teamwork, support -Openness	(C) Working culture: atmosphere, attitudes, competition	-Negative attitudes -Individualism, not enough support and encouragement -Unhealthy competition
-Reciprocal and informative communication -Experiencing meaning and benefits of work -Sufficient prosocial skills and behavior of individuals, taking individual differences into account	(D) Dynamics of interaction between individuals and in the community	-Limited communication, fear to express ideas, -Lack of motivation, not experiencing meaning at work -Not being well at work, insufficient personal skills or resources

community. These four factors were found to be the key or core factors, which are capable of either boosting or preventing innovation, and at the same time being deeply connected with compassion. Many of these factors are present in all types of organizations, and thus, they are pivotal for either creating or hindering novel innovations.

Our third key finding is that the four factors are interlinked. As some of our informants explicitly noted, for example, openness in the interaction between team members might lead to an improved working culture, which might lead to better resource use and even to structural transformations in the organization. In our analysis, several different patterns of connection between the factors were found, not only linear or causal connections. This interconnectivity is characterized by intertwinement rather than a clear causal process. Thus, for promoting innovation in organizations, it is not enough to focus, for example, on strategy alone or merely to develop the working culture—all of the factors must be taken into account.

Our fourth and final key finding is that compassion is a vital feature of promoting innovation within those four recognized aspects. The results of our research show that innovation is linked to compassion in different ways. Compassion is strongly expressed not only as an individual's internal experience but also as a relationship between individuals and communities and as a community experience. Miller et al. (2012) point out that because compassion is other-oriented in nature and is very much a human emotional experience, compassion also acts as a prosocial motivator that encourages the search for solutions to problems. Prosociality means, among other things, that people are willing to take into account information that others possess. It can also increase an understanding of information from the perspective of others and identify differently with the situations one wants to solve and help. Expanded perspectives can increase cognitive flexibility, willingness to take risks, and openness to the complexity of different situations (De Dreu et al., 2000; Grant and Berry, 2011; Polman and Emich, 2011; Miller et al., 2012).

Compassion can facilitate the integration of new and different ideas or creative approaches to problems. Openness to different ideas allows for integrated thinking about solutions (Miller et al., 2012). In the factor of strategy and structures, both the design processes and their end results should be compassionate to create possibilities for innovation. For innovation to emerge, the design processes should be inclusive and informative, and the organizational structures should be one's promoting compassion and connections. In the factor of resources, the allocation should be fair and should encourage their use for compassion both toward oneself and others. Moreover, in the factors of working culture and interaction, compassion will need to be a core element of everyday life and organizational development, present both in practices and values for innovation to emerge.

7. Conclusion and discussion: Compassion as a key to innovation

Our analysis shows that innovation is profoundly and diversely connected to compassion. Particularly copassion – an element of compassion – is connected to innovation. Particularly copassion is seen by the informants as a key feature in balanced, healthy workplaces. This is in line with previous research. Earlier studies, including the field of organizational research, have found that, at a collective level, compassion is the ability and strength of individuals and organizations to respond to changing situations, in times of uncertainty, for instance, how to direct

different resources, particularly during difficult times (Dutton et al., 2006). Compassion has been found to activate an organization's capacity for appropriate flexibility in changing situations (Powley, 2009) and to contribute to organizational performance improvement and learning (Dutton et al., 2006; Powley and Piderit, 2008).

Our core contribution lies in revealing and highlighting the multidimensionality of compassion regarding innovation. First, both compassion and copassion—that is, reacting to both the suffering and joy of others—are pivotal factors for promoting innovation. Second, we found that compassion is deeply interwoven at all levels of organizations: in the dynamics of interaction, in the working culture, resource management, and organizational structures, etc. It can be advanced at all or any organizational level, and previous research has shown, prevented, and conversely destroyed in any of them (see, e.g., Singh et al., 2018). Compassion is neither a single variable or practice that could be added to an organization nor should it be thought of only after 'the productive work' or 'the core tasks' has been taken care of. For innovations to flourish, compassion is to be cultivated throughout an organization. Third, compassion is in many ways in a key position regarding innovation: the existence of it promotes innovation, but the lack of it powerfully prevents innovation. Compassion, thus, is not only a 'booster' or something extra but also a key element of a functional organization.

These findings have clear implications for the study of compassion in organizations, encouraging focus on the interplay between different levels of organizations. Innovations are not the responsibility of any single role or department, naturally. Furthermore, our findings have implications for organizational development and practice. There are strong reasons to take compassion seriously as a key asset in organizations, not as an expense, but rather in relation to flourishing creativity and innovation.

8. Limitations of the study

Our study has some significant limitations, particularly related to the research material. Although our material was collected from various types of organizations in the business and public sectors, we mainly focused on expert tasks and collected material in one specific cultural and geographical context. The theme should thus be studied further in different cultural contexts, especially those beyond 'white, educated, industrialized, rich, and democratic' (WEIRD) settings. However, in our exploration of organizations in various sectors, we interestingly found no significant differences in the experiences of relating innovation with compassion. This indicates that with compassion, we are indeed looking at a basic human need and capability, which is equally relevant in all workplaces and organizations.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and

institutional requirements. The patients/participants provided their written informed consent to participate in this study.

Author contributions

JS and EJ were largely responsible for the data collection and analysis. All four authors took part in writing this article and agreed to be accountable for the content of the article.

Funding

This study was funded by the Finnish Funding Agency for Technology and Innovation (2684/31/2014).

Acknowledgments

We wish to acknowledge the support and contribution of our colleagues in the University of Helsinki—first and foremost Anna

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Seppänen—and in the international research community—first and foremost Monica Worline. We also wish to acknowledge Gillian Crabbe at the University of Helsinki's Language Services for revising the English language of the article.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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OPEN ACCESS

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SPECIALTY SECTION

This article was submitted to
Organizational Psychology,
a section of the journal
Frontiers in Psychology

RECEIVED 27 November 2022

ACCEPTED 21 February 2023

PUBLISHED 22 March 2023

CITATION

Pule N and Gibney J (2023) South African
student leaders' role experience through social
dream drawing: A driver of compassion.
Front. Psychol. 14:1109169.
doi: 10.3389/fpsyg.2023.1109169

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South African student leaders' role experience through social dream drawing: A driver of compassion

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Introduction: Compassion can be viewed as a central gluing agent for the soul. Coupled with companionship toward a unique quality of listening, we call this companionate listening. South African student leaders' role is central to the decolonization and transformation of higher education based on the legacies founding these institutions. As such, a humanized practice that is centered on more emotional or virtue-embodied approaches than the traditional lens has been sought. This lens offers avenues for innovative, creative, and inclusive perspectives that promote compassion, social justice, and democracy.

Methods: To extend existing conceptualizations of compassion, this research uses social dream drawing to attain "companionate listening" as a means of exploring communication as "exquisite" empathy. Through psychoanalytic theory, companionate listening is theorized from observing the value of social dream-drawing research with South African student leaders.

Results: The drawings show how assuming leadership roles re-ignites feelings and dream images of complex political, historical, social, cultural, and psychological South African intersections that emerge during South African student leadership.

Discussion: It is, therefore, concluded that innovative and inclusive research agendas into new horizons of forms of compassion, like social dream drawing in this research, are necessary within South African student leadership. Accordingly, through social dream drawing, compassionate listening facilitates a process of emotional growth toward an integrated self and group. This is because dreams allow the human capacity for connections that open space for compassion, enabling the feeling of relatedness and connection for student leaders that leads to the more impactful transformation of South African institutions.

KEYWORDS

compassion, transformation, companionate listening, student leadership, social dream drawing

Introduction

This article is introduced with a hypothesis. We hypothesize that through the practice of social dreaming, which combines the drawing of dreams in a group context and sharing the associations to the dreams and drawing, a compassionate field is constructed through these interactions along with multiple shared meanings. In this field, compassion can be viewed as a central gluing agent for the soul, which couples with companionship toward a unique quality of listening, which we call companionate listening. Accordingly, this genre of listening promotes new frontiers of innovative and inclusive research agendas. Thus, in this study, we aim to extend the neuroscience lens on compassion in the context of working with student leaders in South African universities. From a neuroscience perspective, compassion mirrors responsiveness to the suffering of another while incorporating the desire to help.

According to Bion (1960 cited in [Abel-Hirsch, 2019](#), p. 171), truth and compassion are human senses that go together and are needed if individuals are to satisfy their needs for curiosity and emotional/mental growth.

Neuroscientists view compassion as a response to stressful conditions fostering both relationships and resilience, which are otherwise not included in empathy ([Chierchia and Singer, 2017](#)). In fact, behaving in a compassionate manner affects the body quite powerfully toward healing ([McGonigal, 2016](#)); while, according to neuroscience, constant states of stress and anxiety reduce the capacity for compassion ([Levine, 2021](#)). Neuroscience differentiates between compassion and empathy, stating that empathy only points to sharing the experience of another's emotional state without the prosocial motivation to become involved in their situation ([Singer and Bolz, 2013](#); [Ashar et al., 2016](#)). However, in our extension of the neuroscience lens regarding compassion, psychoanalytic theory views empathetic listening as a co-creative space of meaning toward a cohesive or integrated self or group ([Akhtar, 2013](#); [Long, 2016](#)). This type of empathetic listening helps to establish a mutuality that we would like to think of as incorporating compassion and companionship. Thus, by utilizing social dreaming, shared associations, and dream drawings, we create a compassionate community or field which, through shared stories and generational traumas, produces healing, shared meaning, and expanded identity development.

In our focus of concern in this study, the drawings show how assuming leadership roles re-ignites feelings and dream images of the anti-apartheid activism of the 1970s. Some of these are actually relevant to immediate family members of student leaders. However, much of the material emanated from the field ([Lewin, 1959](#)), created by the student leaders coming together and the intersections between the social, political, historical, and psychological contexts of universities in South Africa. In 2015/16, the #Fallist movement reacted to a perpetuating, segregated, and unchanging system of black and white universities. There were marked differences in resources and amenities across the university system. For example, historically, white universities restricted entry and familiarity largely to black students who now experience difficulty integrating into the institutional culture of the universities ([Bazana and Mogotsi, 2017](#)). English and Afrikaans universities were white populated ([Ilorah, 2006](#)), while black universities, which were established to serve black students who were barred from enrolling in white-only universities, remain underfunded and under-resourced ([Netshakhuma, 2022](#)). In total, 20 years later, students asked what had changed ([Swartz et al., 2019](#)). The answer was nothing much, so students marched, demonstrated, and occupied universities, shutting them down ([Griffiths, 2019](#)). The statue of Cecil John Rhodes and other white leaders was torn down to chants of "Fees must Fall" and "Rhodes must Fall" ([Griffiths, 2019](#); [Swartz et al., 2019](#)).

Post-apartheid, student leaders in South Africa include student representatives (especially Student Representative Councils or "SRCs"), who are elected and perform their role according to the Higher Education Act 101 of 1997 or the more recent National Student Governance Framework ([Republic of South Africa, 1997](#); [South African Association of Senior Student Affairs Professionals, 2021](#)). The Act was implemented as a South African

higher education redress measure regarding the post-apartheid era in South Africa (and South African higher education) to operationalize the co-governance strategy to include students in university management decision-making. Student clubs, societies, and community development leaders are also regarded as student leaders according to this framework. In addition, South African universities sought to invest in the development of students' graduate attributes and employability through student leadership development. Thus, various leadership programs such as the South African Washington International Program (SAWIP), the University of the Free State Leadership for Change Program, the Thabo Mbeki African Leadership Institute at the University of South Africa (UNISA), the Future Health Leaders Program of the University of Cape Town, and others, became avenues for student leadership development ([Getz and Roy, 2013](#); [Pule, 2017](#)). Students who partake in these programs are referred to as student leaders as they represent universities' efforts toward hands-on leadership and skills development that students can apply to universities' extracurricular agendas. Recently, a new form of student leadership emerged through the #Fallist movements such as #Fees Must Fall and #Rhodes Must Fall, which resulted in other protests or activism regarding fees, the university language of instruction, issues of access, and so on. These student leaders are called activists or non-positional leaders and usually lead justice movements or protests; they receive attention from university management and impact university policies without being linked to any formal leadership role within the university itself ([Pule and May, 2021](#)).

The South African student leadership landscape may be fragmented in terms of the consolidated definition of the role of student leadership. However, South African student leaders, regardless of their role, commonly contend with the effects of the injustices of the past, including transformation, decolonization, and social justice issues. Thus, South African student leaders can often be misunderstood, which possibly leads to their role being confused, especially against the background of the recent protests that have been labeled as destructive and violent. This can also lead to a misconstruction of the various forms of student leadership that currently exist and, consequently, a misinterpretation of their student leadership experiences. Though the definition of student leadership may be vague, it ultimately has to do with the way student leaders are taking up their membership in the university, which affects them psychologically and emotionally.

The membership of student leaders in the university and its effects on them psychologically and emotionally are linked to their primary tasks ([Long, 2006](#)). The primary task is the one thing the organization must do to survive ([Lawrence, 2005](#)). The primary task for student leaders involves attending to South African transformation and decolonization imperatives ([Pule and May, 2021](#)). As this primary task involves work beyond the university, it places student leaders as important players within the greater society ([Bazana and Mogotsi, 2017](#)). We posit that while this group (of student leaders) is working with this primary task, the group also manages anxiety that surfaces during their interactional space, sparked by the group working with its primary task ([Bain, 1998](#)) in the context of the field. Through their interactions, they generate emotional communications or affects that have meaning and move people as a field or energetic mass which

co-evolves and spreads and ultimately surrounds the individual, dyad, group, or organization. It is non-verbally communicated through projective identification and parallel processes, which should become awareness tools for diagnosing the dynamics of any situation within the organization. Projective identification “refers to a group of fantasies and accompanying object relations having to do with the ridding of self of the unwanted aspects of self; depositing of those unwanted “parts” into another person and finally with the “recovery” of a modified version of what was extruded” (Ogden, 1979, p. 357). Ogden (1979, p. 358) continued to explain that in a schematic manner, projective identification is a process involving the following sequence: first, there is the fantasy of projecting a part of oneself into another person and of that part taking over the person from within; then, there is pressure exerted *via* the interpersonal interaction such that the “recipient” of the projection experiences pressure to think, feel, and behave in a manner congruent with the projection; finally, the projected feelings, after being “psychologically processed” by the recipient, are reinternalized by the projector. As a result, projective identification facilitates the psychological processing of student leaders’ fantasized material, or unconscious thoughts and feelings, by using the interactional space as a holding space for relational exchange. On the foundations of Bion’s theorizing, this means that projective identification enables communication to receive, understand and metabolize the unconsciously exchanged thoughts and feelings within the mutually beneficial interaction (Robinson, 2005). A parallel process occurs where two social systems, in contact with each other, demonstrate similar “effects, behaviors, and cognitions” (Adelfer et al. cited in Berg and Smith, 1985, p. 31). [SIC]

Five theoretical concepts set the ground for discussing field creation, co-creating realities, and parallel processes. The five concepts are (Lewin, 1959, p. 27–150; Parlett, 1991 p. 71–73): “Organization - meaning comes from looking at the total situation”, “Contemporaneity - nothing exists beyond the “here and now”, “Singularity - avoid generalizations and focus on the unique”, “Changing Process - no moment the same, nothing is fixed or static”, and “Possible Relevance - whatever exists, exists only now as flux is basic to experience”. Heavily influenced by the Gestalt School of Psychology, Lewin describes the qualities of researchers as the use of self, presence, present-centeredness, and focusing on “what is” in the “here and now” at the level of feelings, sensations, dreams, fantasies, images, and so forth (Clarkson, 2000, p.1, 5 and 14). Accordingly, the field brings the psychological past, present, and future in one moment, such as in “Contemporaneity” (Lewin, 1959, p. 27).

Suitably, empathy and intuition are methods of gaining quick and deep understanding while working on the primary task. Empathy is used to reach feelings, while intuition is used to get ideas from thinking by picking up on clues that empathy gathers. Moreover, empathy employs the cognitive, perceptual, and affective capabilities leading to intuition and coming before insight. Understood as a communication between one unconscious and another, listening with this type of empathy is the intersubjective co-produced (Sutanto, 2021). Thus, if a group is viewed as an entity or unit (such as in group-as-a-whole) (Long, 2016), then empathetic listening is a co-creative space of meaning,

an approach toward a cohesive or integrated self (or group) proposing a sense of psychic coherence or facilitated notions of hospitality, derived from group members listening to each other “empathetically” (Akhtar, 2013). This hospitality leads to an engagement with and understanding of each other (in the group) and the group’s surroundings, which psychoanalysts refer to as transference interpretation, making association conceivable (Sutanto, 2021). Consequently, the group can reach a type of homeostatic connection—as a system—such that continuity of being, validation, and harmony with the environment is realized (Akhtar, 2013). This harmony provides a holding affirmation resembling a deep connection and recognition of the perceptive and experiential states of another. As such, empathy in listening helps to establish a mutuality that overlaps with the neuroscientist’s conceptualization of compassion.

However, different stories develop different polarities and perspectives. We propose that these polarities need to be understood to develop a shared reality and sense of belonging through compassion and companionship. Our sense of integrating compassion and companionship is about using emotional communication to listen with empathy while meeting the other’s needs and having one’s own needs met. Therefore, participants are witnessing and experiencing each other’s experience—such that through the witnessing, healing occurs. Consequently, innovative and inclusive research agendas are necessary to humanize research and transform institutional cultures toward restorative and collaborative practice.

Theoretical framework

Using socio-analysis and specifically social dream drawing, experiences of student leaders as role holders in South African universities were explored for deeper understanding. Socio-analysis, as stated by Long (2017), focuses on the study of role even as an element of society, using a combination of psychoanalysis with systems thinking and group relations to understand the psychology and behaviors of people within their social context. The social context is seen as the collection of thoughts, feelings, actions, and processes of people in-context, which are long-term projected aspects of the social environment of relationships. Employing social dream drawing, the socio-analytic understanding of the student leaders’ role experiences was explored by sharing dreams through drawing. According to Mersky (2022), who developed the social dream drawing approach, this is a social thinking process that provides a verbal and visual tool to explore social and psychological issues in a group setting. This manner of exploration helped uncover and verbalize rich insights and meanings about student leaders’ experiences of their leadership roles through a creative and playfully spirited methodology.

Another piece of a psychoanalytic theory that may be helpful for the reader is how the field is used in psychoanalytic ways of working. According to Katz (2017, p. 113–115), there are three field theories, stories, metaphors, and dreams, each with a different focus. The analytic style of each researcher gives priority to different aspects of the participant’s narrative. Each analyst listens to different emergent configurations of movement in their

relational interactions. Like valences in basic assumption groups (Bion, 1948), each individual probably prefers a particular field approach and associated form of listening.

The author's preferred approach is the Oneiric Field model, also known as the "Post Bionic Field Model" (Katz, 2017), relying on what the researchers' and participants' body sensations, daydreams, hallucinations, and reveries reveal and treating the material as if it were a dream. It follows Bion's contention that we dream all the time, even when we are awake but are not aware of it. It also assumes that we will be projected into by others; hence, we can emotionally and psychically pick up their unconscious material and metabolize it for them (sense-making).

Methodology

The research was conducted across multiple South African universities located in provinces in Gauteng, the Free State, Eastern and Western Cape, Limpopo, and KwaZulu-Natal. The research sites characterize the various types of South African universities in terms of urban and rural, as well as historically white or black universities, and encompassed the diversity of student populations. The participating student leaders belonged to various structures of student leadership, although mostly linked to student representation councils. In total, 11 social dream drawing groups were held, one session per group. Each group consisted of five to seven student leaders. Participant selection occurred through purposive, volunteering sampling; purposive because the research looked for participation from students who held a leadership role in the university. Student leaders participated without coercion and could withdraw their participation at any point during the process.

Ethical approval for the research was obtained from the University of the Free State, General and Human Research Ethics Committee (GHREC). In addition, institutional permission to conduct research at the various institutions was obtained through the respective institutions' ethics committees.

The research used a qualitative approach, focusing on the descriptions of the dreams and accompanying drawings, as well as on the co-construction of the student leadership experiences presented verbally and visually through social dream drawing. The verbal expression included the description of the dream and corresponding drawings, the associations made to the dreams and drawings, as well as the meaning-making pertaining to student leadership experiences based on the emerging associations and hypotheses inspired by linking dreams (and drawings) or associations, one to another (Mersky, 2022). Verbal data were collected by means of a voice recorder and later transcribed. Visual data were indicated by the drawing of the dreams and photographs of the drawings (Mersky, 2012) that were captured; these were kept in an electronic file. Themes were derived from the collected data by studying the transcribed text and photographs. Based on the themes, the researchers reflected on the impact of social dream drawing in relation to student leadership experiences. They noted the significance of how student leaders shared through social dream drawing and their response regarding their experience of participating in social dream drawing. This reflection raised the researchers' understanding of the role of compassion in the student leaders' sharing and their role experience.

Social dream drawing

Prior to gathering groups of student leaders using social dream drawing, an information sheet was provided to each student leader who had indicated an interest in participating. Student leaders signed a consent form (Leedy and Ormrod, 2014) and sent this to the principal researcher by email. The researcher managed the process by keeping the groups between five and seven student leaders per group. The information sheet explained the process to be followed during social dream drawing, the expectations, and information about the research, including its aims, objectives, and intentions (Leedy and Ormrod, 2014). Student leaders were asked, through the information sheet, to think of a sleep dream they may have had at some point in their lives: It could have been years, weeks, or days before and could relate to their student leadership experiences (Mersky, 2012). They were asked to make a drawing of this dream and bring it to the group meeting (Mersky, 2022).

The word "social" in social dream drawing refers to the application of socio-analysis and the social context as defined earlier. Accordingly, the researchers and participating student leaders refer to "the group" when conducting social dream drawing (Mersky, 2012). In fact, researchers and participating student leaders (the group) work together to co-construct the understanding of student leadership experiences which led to the synthesis relating to compassion and companionate listening. During the group meeting, the researchers are hosts of the social dream drawing and provide information to student leaders about the process to be followed as a guide through the three-part process of social dream drawing. This guidance pertains to keeping the boundaries of the task for each of the three-part processes, including the time allocated for each. The first part is to share their dream. The corresponding drawing is allocated 10–15 min of the allocated hour; the second is making associations to the dream drawing is allocated 20–25 min. Finally, meaning-making derived from the emerging associations occurs for the remainder of the hour (Mersky, 2012). To proceed through each dream drawing exploration for 1 h each, student leaders take turns to share a dream and corresponding drawing, one at a time, although no order is assigned. Student leaders had the opportunity to share when they felt that they were ready to share. This approach toward social dream drawing is favorable due to the democratic and co-productive nature of the method (Mersky, 2012; Manley, 2014).

Once the dream and its drawing were shared by respective student leaders, one at a time, the group (including researchers and participating student leaders) had the opportunity to ask questions, mostly clarifying, about the dream and the drawing. Afterward, the dreamer (i.e., the student leader taking a turn to share their dream and drawing) placed the drawing in the middle of the group circle, symbolically handing the drawing over to become a tool that the group could use to explore student leadership by initially making associations to the drawing. These associations consisted of anything that came to the mind of group members, such as a song, a movie, a saying, a memory or experience, or another dream (Manley, 2014). Associations are allowed to float and can be shared at any time, organically, once the dream drawings are shared to allow a dynamic process of thoughts, feelings, and reactions to emerge organically without much guidance or control from the researchers (Mersky, 2012; Manley, 2014). Thereafter, the

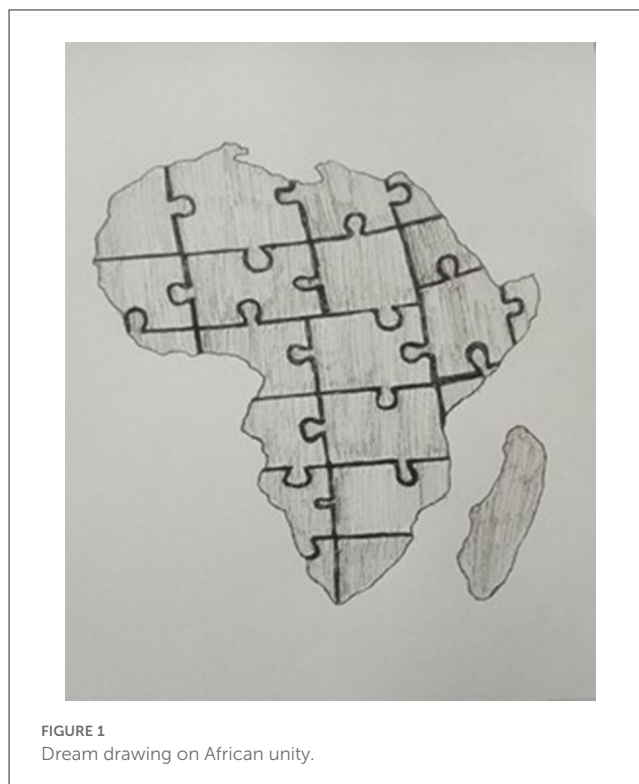
group used the associations to make meaning regarding student leadership. To focus on the meaning-making portion of the three-part social dream drawing processes: The researchers, as the hosts of social dream drawing, verbalized the following guiding statement: *now that we have made these associations, what is the meaning that we make about student leadership experience?* The group responded to this by articulating ideas regarding the meaning that they make about student leadership by doing the following: 1. linking one dream drawing to another, 2. linking dream drawings to contributed associations and 3. linking associations one to another, including allowing emerging associations to raise insights regarding student leadership (Mersky, 2022). Researchers have an important role to play in this part of social dream drawings as they can offer a hypothesis that can be further explored by the group to make meaning of student leadership (Mersky, 2012). As more dreams and drawings were shared, meaning made about student leadership built progressively. Once all the dreams were shared, student leaders were asked to reflect and comment on their experience of the social dream drawing experience. This reflection led to the emergence of the topic discussed in this article regarding compassion and companionate listening, where student leaders indicated the innovative and inclusive kind of listening and connection they experienced from social dream drawing.

Dream drawings of south african student leaders

Dream drawings showed various aspects of student leadership in South African universities. Using systems' thinking, the issues raised from dream drawings pertained to experiences that can be described as personal and individual student leader experience which entailed experiences involving their respective university, issues cutting across universities, as well as in the higher education sector at large. In this way, personal and individual experiences reflected group (i.e., student leadership at respective campuses or as a South African student leader) and organizational (Higher Education nationally in South Africa or as part of the global sector), and vice versa. Some issues raised related to the South African past, especially during talks about social justice, the role of student leaders in university management and decision-making, how student leadership is perceived by student leaders or the general student population, as well as how leaders in South Africa are perceived.

Accordingly, dream drawings showed the significance of unity between student leadership, South African higher education, South Africa, and African leadership. Student leaders felt that unity was an important tool to have for successful student leadership or leadership in general and that unity had a significant role to play in the progress, development, and forward moving of the country. From this, markers of inter- and trans-generational trauma based on the historical-political-social and psychological context and impact of apartheid and post-apartheid emerged. For example, a student leader showed a drawing about a dream that he had about putting together a jigsaw puzzle of the world. In the drawing (Figure 1), the map of Africa is shown.

The hooks holding the jigsaw puzzle together were associated with the nipples of a woman's breast that supplies nourishment and



sustenance and denotes care, connection (interconnection), and things being held together. In addition to the role of women in unity that arose in the ensuing conversation, African unity became the primary focus therein. The student leaders wondered whether student leaders were united, at the campus level or on a national level, whether there were possibilities to unite with student leaders across the continent even, and what that might mean for future leadership and the progression and success of Africa. An interesting feature of the drawing was that no hooks (or nipples) were included for South Africa. Across the whole jigsaw puzzle, there were hard and solid lines that bounded the country from one to another. Therefore, without hooks and with these hard and solid boundaries, South Africa was kept completely removed from the rest of the continent. This implied a unique characterization of South Africa and how student leaders saw the apartheid past and post-apartheid manifestations as placing a unique demand on South African youth, which they indicated as a heavy burden and an isolating experience.

Moreover, the conversation regarding the unity of Africa, the diversity of Africa, how people are the same and different, and holding different expectations and realities based on the different colonial pasts in different African countries, or the effect of apartheid in different provinces in South Africa, surfaced. This also led to reminders of those who had died for freedom. Death was associated with skeletons, and skeletons in the closet led to a conversation about secrets held by elders that enable or inhibit progress in South Africa or African unity in general.

Even in writing this article, the authors were aware of having trouble keeping their eyes open. They drank more coffee and sought medical advice, finally concluding that the affect embedded in the article and the study is depressing, and as one reads and writes about it, one feels sad and funereal in relation to the people who have suffered and died through apartheid.

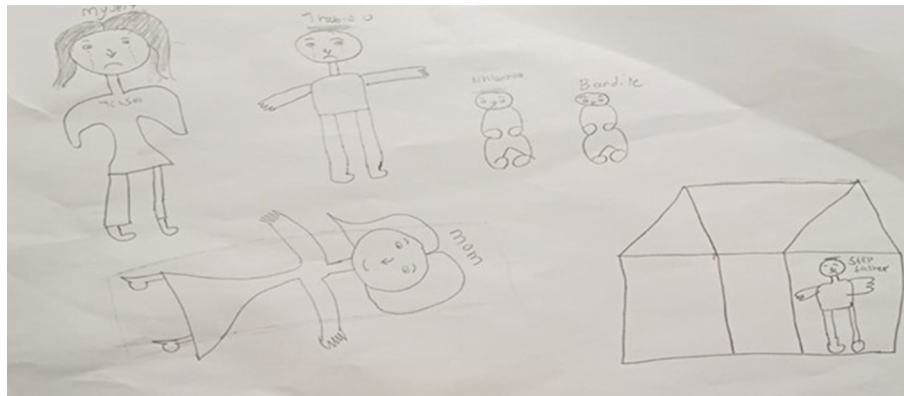


FIGURE 2
Dream drawing on absent fathers, sick mothers, and resented leadership.

The setting of the dream was a dark room. Through association, this setting was linked to loadshedding in South Africa, which led to a conversation about privilege and access to resources and relating to students based on their socio-economic backgrounds and the role of student leadership pertaining to this. As a result, student leaders thought about South Africa during apartheid and after, including the role of the #Falloist movements in decolonization and transformation. The above has been characterized as feelings related to trauma related to the South African legacy. This feeling resonated, given the intense emotionality involved, the sadness in the room, heaviness or feeling drained, talks about anxiety, and explicitly disturbing examples of violence and injustice discussed.

In another dream drawing (Figure 2), the student leader shared a dream about the complexities of leadership. In this dream, she, her stepsiblings, and her mother were outside their house. Her mother was sick, almost dying. The dreamer took responsibility for nursing her mother back to health but felt resentment toward her biological (elder) brother, who was missing from the drawing. In addition, she felt resentment toward her stepfather, who locked himself inside the house alone for self-protection.

This drawing evoked a conversation about absent fathers and the frustration experienced by student leaders for missing leadership examples and having no one to look up to. The aftermath of history and politics that has resulted in rare examples of leadership by women, as well as the death of Mandela, who, in their words, left no one to look up to, advances into psychological and social impact. At the end of this conversation, the student leaders called social dream drawing a wound-healing session where they connected and learned about each other at a deep level for the first time, even though they had been student leaders at the same university for some time. This speaks to a desire and means for connection and how social dream drawing was related to enhanced collaboration and relationships, including a deep connection linked to sharing deep emotions by listening to each other in ways that they had not experienced before. Fake, step or *de facto* fathers were also depicted as letting the family face the brunt of the violence of apartheid behaviors.

The last drawing (Figure 3) that we will include is one of many regarding dreams about protests (or organizing a protest or being part of a protest).

In this drawing, the student leader described an instance where he was part of a protest that he helped organize. At the university where he exercises student leadership, it has become difficult these days to organize a protest. In this case, in the dream that he was explaining, he (and his group) had a successful attempt. During the protest, he stood at the top of a massive van that resembled an army or military truck, shooting at a building of the university, although the gun was not in his hand but suspended from his hand. Some students were also shot at while protesting for free education.

The dream brought up a conversation about the contentious barriers relating to student leadership. These relate to the catch-22 about the legislative involvement of student leaders in university management and decision-making that stands in tension with the formal and informal demands of being a student, as well as the tightrope that student leaders walk in implementing their student leadership role without jeopardizing the attainment of their university degrees. Feelings of intimidation and frustration and feeling defeated and muted flared up. At an associative level, shooting at the building of the university was about attacking the institution in response to student leaders feeling silenced, thus expressing their frustration and inflicting impotence. The building is a monument, representative of a past they struggle to change. Here too, student leaders applied listening to each other in a way different from their other engagements. In their words, they appreciated how psychology facilitated a space to process and express difficult politics within the student leadership context. They felt bonded after social dream drawing.

At the same time, the conversation about bonding related to a social dream drawing at another university. This conversation focused on the sense of bondage experienced in student leadership. Student leaders, at times, feel trapped within the system in terms of the catch-22 expressed above. They feel conflicted in their loyalties to their different group affiliations: the university that pays them, the students who elected them and whom they serve, the families they represent, and the political parties to which they belong. Psychoanalytically, this relates to a parallel process in the field that points to an associative unconsciously (Long, 2017) derived connection that social dream drawing facilitated.

Discussion

The social dream drawing reveals the significance of unity (in student leadership, South African higher education, South Africa, and African leaders), themes about bondage (as an act of being close in relatedness, or bonded to one another, and simultaneously as restriction or slavery) and the emotional burden of student leadership contained in the metaphor of incapacitated or absent fathers, and elder daughters who step into leadership because of “sick” mothers.

In addition to the capacity of social dream drawing to drive compassion in itself, due to its participatory and engaging nature, using abductive reasoning for theory-building about student leadership role experience results in the emergence of compassion in terms of self-compassion (from the student leaders toward themselves), compassion toward one another, and researchers’ compassion toward the student leaders. Accordingly, social dream drawing helped student leaders to express themselves, make sense of their experiences, and to process them—they felt the issue (emotionally or psychologically) and brought it to life through the drawing. Once that happened, they became sharper and better advocates. By hypothesis, this proto-mental level of communication is where we feel we connect authentically as embodied beings—alive animals—and from where we feel compassion emerge. Thus, social dream drawing acts as a mechanism to access information regarding the role experience of student leaders, opening space for a different kind of listening.

Trotter (1909) introduced the concept of herd instinct in the early 1900s (Swanson, 2013). In this, the inherent capacity for compassion was referred to. According to Trotter (1909), humans have the disposition to act in the interest of the social group; thus, he proposed a model of cooperation as a basis for adaptation. Suttie (1960 [1935]) followed by referring to our innate need for companionship. It was based on Trotter (1909) and Suttie (1960 [1935]), for instance, that Bion (1961, 1970), the British group psychoanalyst, developed his group work approach. According to Bion, groups are more powerful for health and healing. His “container-contained” concept (Bion, 1970) introduced “reverie” (Ogden, 1979; Katz, 2017) and the capacity of the mother to emotionally digest overwhelming feelings leaving the child feeling understood and contained. This transformed Klein’s Projective Identification from an evacuative defense to a basis for emotional communication, including introjective identification (Ogden, 2004). Through reverie, there is an engagement that is achieved cognitively but also emotionally by an interception of rational functioning and receptivity toward listening without memory or desire - a means to identify with the other that creates a ‘new’ we-ness or me-ness, in terms of Bion’s Basic Assumptions of Group Dynamics (Bion, 1970). So, Bion, 1948, p. 20) indicated that mental life extends beyond the physical boundaries of the individual “transindividual”; hence, the relative indistinction between psyche and soma within the individual may in some way be correlated with the background of a substantial (relative) absence of a distinction between individuals. The field (in this case, the drawings and the dream) is thus the unconscious interaction being born for intersubjective determinants to be identified.



FIGURE 3
Dream drawing about protest and bondage in student leadership.

These primitive proto-mental elements being stirred or triggered by the leadership experience and tapping into dreams requires an emotionally containing environment that allows individuals and the group to understand and process the impact of these discoveries and changes occurring. The anxiety-inducing, politically subversive, or counterculture elements surfacing in social dream drawing require a psychologically safe space to engage with and unburden them, so that they are no longer suppressed or expressed in a subversive or aggressive manner (Winnicott, 1964; Bion, 1970; Long, 2002). To do this in a group context, student leaders need to be able to open up to one another in a shared common space, referred to psychoanalytically as “mutuality” (Benjamin, 2004; Harding, 2006). Rather than passive-aggressively complying (twoness) “me/you”, “us/them”, which is the usual university attitude, social dreaming and shared associations and drawings shift them to mutually engaging experiences, giving over to the other mutually, creating a third space for “me, you and us.” This requires each party to understand the other. It is in the process of mutual recognition that the possibility of experiencing the other in reality exists. In the complementary structures of the master-slave discourse fantasy, the other replaces the actual other. There is no struggle for recognition; instead, there is domination, idealization, submission, or related defenses (Harding, 2006).

The above-mentioned leads to the notion of Benjamin (2004) psychoanalytic third, which is how we get to go beyond the experience of the ‘doer, done to’ dynamic in which we are either victim or persecutor. Harding (2006) pointed out that “surrendering yourself to the other’s view, by empathic listening, compassion, and companionship, creates mutuality through the felt recognition and acknowledgment by the other”. Benjamin constructed a three-step process of identification, surrender, and gratitude (Benjamin, 2017, p. 204). According to her, recognition is a form of relational love that enables the stepping out of the “doer, done to” mentality into complementarity (Benjamin, 2011, p. 21).

These all relate to the relational philosophy that is mostly used in explaining African ontology. Ekanem (2012) suggested that African philosophy is about the seeking of meaning and

understanding within the bias and context of African cultural setting and experience, where African philosophy is the reflection of an African, or those who are not African, on how Africans make sense of their existence and the world in which they live, based on the African cultural experience and reality. In this, ideas regarding Ubuntu emerge. Ubuntu premises that a person is a person (or human) because of others (Hailey, 2008). This working model or African philosophy predicts a relational paradigm of interconnectedness and interdependence that is rooted in solidarity among humans toward the achievement of reconciliation and co-existence (Ngubane and Makua, 2021). To make sense of this, Ubuntu is possible in contexts of compassion-companionship where strings of empathetic listening are strung.

We, therefore, propose that people are all connected associatively through the field like mushrooms. The root system of the plants, such as mushrooms (or fungi), called the mycelium, penetrates the roots of plants forming relationships and working together to increase resilience in the whole community (Stamets, 2005). As a great connector of the forest, mushrooms demonstrate one-ness, continuity, communication in relationships, and closeness (Spacal, 2017). Similarly, when learning emotionally, through compassion and companionship using empathetic listening, one starts to have images of what is happening with the other, surrendering self to the other. In this, student leaders can join together and be in a dream state with one another and be able to associate. The sharing of dreams, therefore, creates the field as such, resembling a social mycelium.

It is known that social dreaming is not conventionally viewed as therapy (Manley, 2014). Nevertheless, student leaders in this research referred to sharing dreams as wound healing. This sentiment was expressed in the following quotation:

Quotation 1

“So, in wound-healing sessions like this where we bond and we learn about each other’s dreams and we learn about what each of us has inside of them, yes, we do go through a lot all of us and it felt nice for once to be saying [it is not only happening to me - paraphrase].”

In our interpretation as authors, the social dream-drawing process followed in this research unlocked compassion that allowed the group to process their experiences toward emotional growth and an integrated self and group that ultimately promotes positive social outcomes (Bion, 1961; Akhtar, 2013; Long, 2016). This emotional growth and integration of self and group occur instead of picking up unconscious messages such as shame, guilt, and anger, among other possible messages that can be enabled by the past of apartheid and colonization in South Africa. References regarding picking up these emotional messages are expressed in the following quotations:

Quotation 2

“You are not going to be a good leader if you don’t get angry. Because anger is the fuel of the revolution.”

Quotation 3

“The pressure on the inside becomes too much that you become angry even if someone says a simple word, but you because you have already - you are traumatized! - it releases a sense of anger wherein interpersonal conflict that you can’t control anymore.”

The dreaming, sharing, and drawing built an empathic community that developed meaningful ways of processing these

potentially vengeful and destructive feelings, transforming them into the community glue of self-other-self identification. This extended the individual’s sense of self-boundaries and created a community of shared identification, meaning, and compassion for those who have gone before. This new generation of leaders, akin to the mushroom network of leaders, metaphorically linked arms to produce a resilient, living container to detox racist and apartheid hate and violence from the children of the traumatized victims. By connecting these ideas to the mushroom metaphor, we hypothesize that the use of social dream drawing with student leaders in South African universities calls for companionate (compassion and companionship) listening that drives emotional integration of self and group for restoration and creativity toward new and fresh thoughts and ideas about the student leadership experience in a South African university.

Conclusion

The student leaders’ reflection on social dream drawing involves the realization of the power of social dream drawing. This realization pertains to how it indeed drives compassion and facilitates the feeling of relatedness and connection for student leaders. In this, student leaders feel comfortable to the extent of the research pertaining to the idea that dreams allow the human capacity for connections that open space for compassion. Thus, social dream drawing provides an innovative and inclusive research agenda into new horizons of forms of compassion necessary within South African student leadership.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

The studies involving human participants were reviewed and approved by the University of the Free State, General and Human Research Ethics Committee (GHREC). Additionally, institutional permission to conduct research at the various institutions was obtained through the respective institutions ethics committees. The participants provided their written informed consent to participate in this study.

Author contributions

NP conceptualized the research, collected the data, and conducted the thematic analysis. Both authors contributed to the article and approved the submitted version.

Funding

The National Research Foundation (South Africa) funded the data collection through grant number 129453. The University of the

Free State open access publication fund will contribute toward the publication fees.

Conflict of interest

JG was employed by Managing Differences Ltd. Australia.

The remaining author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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OPEN ACCESS

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SPECIALTY SECTION

This article was submitted to
Frontiers in Psychology,
a section of the journal
Health Psychology

RECEIVED 13 December 2022

ACCEPTED 01 March 2023

PUBLISHED 30 March 2023

CITATION

Sandham C and Deacon E (2023) The role of
self-compassion in diabetes management: A
rapid review.
Front. Psychol. 14:1123157.
doi: 10.3389/fpsyg.2023.1123157

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The role of self-compassion in diabetes management: A rapid review

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Aim: This study aimed to assemble and critically reflect on previously acquired insights from investigations that have already been conducted into the role of self-compassion in diabetes and its management.

Methods: This study implemented a rapid review approach to assess the pre-existing knowledge in a time-sensitive manner. A rapid review involves the synthesis of existing knowledge using a simplified systematic review process.

Results: A total of 16 articles were identified for this rapid review. The main findings from these articles included that self-compassion is associated with improved outcomes (psychologically and medically), self-compassion can be improved through interventions, and that many extraneous factors influence levels of self-compassion.

Conclusion: It is apparent that self-compassion plays a rather significant role in the management of diabetes, and that interventions aimed at developing self-compassion showed success in improving health-related outcomes. It is suggested that future research should build on the possibility of using positive psychology interventions to improve the quality of life of those living with diabetes, and work to better understand the influence of aspects such as gender and diabetes duration on self-compassion.

KEYWORDS

self-compassion, diabetes, diabetes management, positive psychology, rapid review

Introduction

Traditionally, the treatment of diabetes was only undertaken from a medical perspective, despite there being an increase in mental health issues among patients with diabetes (Hanmer, 2014; Ventura et al., 2019). Recently, there has been a shift in focus to the role of mental health in the effective management of chronic conditions, such as diabetes. This study will refer to the two major forms of diabetes: type 1 diabetes (T1D - insulin-dependent) and type 2 diabetes (T2D - non-insulin-dependent). T1D is diagnosed when the body does not produce enough insulin, whereas T2D refers to the body not using the produced insulin effectively (Roglic, 2016). Diabetes impacts the health of many of the body's organs and often results in diabetes-associated complications such as loss of vision, decreased kidney functions, heart attacks, stroke, and limb amputations (Roglic, 2016; Karami et al., 2018).

The management of diabetes is no easy feat and requires many physical and psychological adaptations. However, effective self-management of this condition is vital as it prevents or delays the onset of diabetes-related health complications (Karami et al., 2018). Along with the potential

physical effects, failure to achieve an optimal HbA1c level frequently increases psychological stress, which often leads to negative emotions, judgement from others (such as from doctors, family, and friends), and an overwhelming sense of failure and diabetes resentment (Ventura et al., 2019). For the previously stated reasons, a more Holistic approach must be adopted in the management and continued treatment of diabetes, including a dimension of mental health and well-being, such as self-compassion.

Mastering the art of being self-compassionate leads to many positive effects, both physiological and psychological. In short, self-compassion can be defined as the ability to show kindness and understanding towards oneself, particularly in times of hardship (Gilbert, 2018). Ventura et al. (2019) conducted a study in which they concluded that an increase in levels of self-compassion results in an overall decrease in anxiety, depression, and stress, while also leading to an increase in health-promoting behaviors. This may be attributed to the strengthening of a healthy relationship with oneself that inevitably follows when engaging in self-compassionate behaviors. Self-compassion is associated with other tenets of positive psychology, such as mindfulness, self-care, self-efficacy, and family empowerment (Whitebird et al., 2017; Rahmani et al., 2020; Loseby et al., 2022). These various facets need to be further explored to determine the role they could play in the development of self-compassion and, further, improved diabetes management.

However, it seems apparent that self-compassion is essential in reaching a state of prime physical and mental functioning. Hence, self-compassion may provide a way to improve the management and treatment of chronic conditions such as diabetes (Ferrari et al., 2017; Jackson, 2018; Tanenbaum et al., 2018; Morrison et al., 2019; Ventura et al., 2019; Rahmani et al., 2020; Akbari et al., 2022; Loseby et al., 2022).

Persons with diabetes frequently struggle with a variety of mental health issues as a result of the daily stresses that come with living with this chronic condition. Around 20% of people living with diabetes experience prominent levels of distress concerning their diabetes, while 12% appear to be living with major depression (Friis et al., 2016; Ventura et al., 2019). Along with symptoms of depression and distress, persons with diabetes have a four times higher chance of experiencing symptoms of anxiety; and have an increased risk of being victims of stereotyping, stigma, discrimination, and judgements made by others on their condition (Ferrari et al., 2017; Ventura et al., 2019).

With the factors indicated earlier in mind, there is no doubt that the psychological component of living with this condition must be considered when creating a suitable diabetes care plan (Charzyńska et al., 2020). Karami et al. (2018) argue that there is a great need for psychological interventions to help people accept their condition, equip them with the tools to engage in behavioral changes, and eliminate the psychological barrier between people and their effective control of the condition.

Self-compassion may provide the missing link to the effective management of this condition. This is evident in the studies that concluded that increased levels of self-compassion led to increased life satisfaction, more effective self-management behaviors, better glucose control, and a more optimal HbA1c (Karami et al., 2018; Charzyńska et al., 2020). Furthermore, studies in which interventions were conducted to improve levels of self-compassion found a statistically meaningful reduction in HbA1c levels, and an increase in general mental health, once the participants had completed the intervention

training (Friis et al., 2016; Tanenbaum et al., 2020). Therefore, it is apparent that this relationship between self-compassion and diabetes management exists and needs further investigation. Tanenbaum et al. (2020) went so far as to coin the term “diabetes-specific self-compassion,” showing the undeniable connection between these two components. The information reviewed in this study will provide a basis for existing knowledge in this field and hopefully lay the groundwork for future studies.

Methods

Ethics statement

Ethical approval was granted for this study by the Health Research Ethics Committee (HREC) of the North-West University (NWU-00098-22-A1). Furthermore, no conflict of interest was declared by either reviewer, and both reviewers had undergone ethics training within the last 3 years. The primary reviewer ensured that ethics were upheld throughout the research process by being rigorous, responsible, and transparent with the data and engaging in continuous discussion and interaction with the secondary reviewer.

To ensure rigor was upheld throughout the study, four criteria were met: credibility, transferability, dependability, and confirmability (Lincoln et al., 1985). Credibility was ensured through reflexivity (keeping a reflective journal), peer examination (getting the article critically revised by experts), and structural coherence (integrating the data and comparing it with other literature). Dense descriptions of the method, data collection, and data analysis process allowed for the construct of transferability to be upheld. Dependability was ensured through the code-recorder procedure, using dense description, and keeping an audit trail. Lastly, confirmability was ensured through maintaining an audit trail, reflexivity, and triangulation, (which refers to the process of looking at the topic from different perspectives) (Lincoln et al., 1985).

Review approach

A rapid review approach was implemented as the goal of this study was to assess what is already known on the topic of interest in a time-sensitive manner. A rapid review involves synthesizing existing knowledge through the implementation of a simplified systematic review process, enabling the reviewers to meet said goal (Grant and Booth, 2009; Dobbins, 2017). The five-step approach recommended by Dobbins (2017) was implemented to ensure that scientific rigor was upheld throughout the completion of this rapid review. The five steps are as follows:

The defining of a practice question

After a thorough literature review, the practice question was defined as: What conclusions may be drawn from available literature on the role of self-compassion in diabetes and its management?

Searching for research evidence

The search engines used to identify literature for this study included Google Scholar, LexisNexis, EBSCOhost, Emerald Insight Journals, JSTOR Journals, Juta, Sabinet Online, African Journals,

ScienceDirect, Scopus, Web of Science, Boloka: NWU Institutional Repository (NWU-IR), and EBSCO Discovery Service (EDS). Keywords included in the search were 'self-compassion,' 'diabetes,' and 'diabetes management,' and they were combined in the following way: (self-compassion OR self compassion) AND (diabetes OR diabetes management OR diabetes control OR diabetes self-management). 'Mindfulness' was not included in the search terms as, although it is relevant to the topic, it encompasses a different field of study beyond the scope of this research. Once the search had been completed, the researcher found further literature by reviewing the resources used by the authors to expand the search further.

The inclusion criteria of literature for this review study were that the literature was published between the years 2014 to 2022 and was deemed scientifically sound. This time range was selected to include the latest literature and to ensure the information selected was relevant, given the acceleration of scientific research in recent years. The year 2014 was chosen as this was the year in which the first publication regarding self-compassion and diabetes management was made (Hanmer, 2014). The following literature was included as it was believed to have enough scientific rigor to allow for its inclusion: full-text journals, peer-reviewed studies, quantitative studies, qualitative studies, and mixed-method studies. Published PhD theses and master's dissertations were also included as their studies would have gone through the necessary ethical considerations and would likely adhere to the principles of scientific rigor (de Klerk and Pretorius, 2019). In the search, no articles published in other languages relevant to the topic were found; therefore, none were included.

The relevance of peer-reviewed literature in this rapid review was determined using the title and abstract. The process of eliminating articles was completed independently by each reviewer and consisted of them reading the gathered literature and deciding if it met the inclusion–exclusion criteria previously mentioned (as seen in Figure 1).

The critical appraisal of the literature gathered

The primary and secondary reviewers manually undertook the appraisal process. Once the initial list of literature to be included in the rapid review had been collected, the primary and secondary reviewers assessed the articles independently to determine if the findings were meaningful, reliable, valid, and relevant to the study (Dobbins, 2017; Wilson et al., 2021).

This analysis and assessment process was done by reading the articles and deciding if the research they report on was methodologically sound. The JBI's (2022) critical appraisal tools were used to help the reviewers determine if the literature was appropriate for inclusion in this rapid review and met the ethical standards of this study. Depending on the type of literature under consideration, different checklists were used to assist the reviewers in assessing the trustworthiness, relevance, and results of the studies under consideration (JBI, 2022). The main checklists used included the JBI Critical Appraisal Checklist for Qualitative Research, the JBI Checklist for Quasi-Experimental Studies, and the JBI Checklist for Randomized Controlled Trials (JBI, 2022).

The synthesis of the information collected

After literature had been read in its entirety, relevant information based on the research question was extracted; including the author(s),

the date and type of publication, in which country the publication was written, the aim of the publication, the research design, the outcomes measures in the study, the demographics of participants involved, the main findings of the publication, and the limitations identified by the authors (Dobbins, 2017). All data relating to the topic were included to prevent the omission of findings or results that may have been relevant to the synthesis process. The specific data components that were analyzed included details of self-compassion (what it is, why it is essential, and what interventions exist); details regarding the management of diabetes (what effective management involves and how to achieve it); findings or results (the role, if any, that self-compassion plays in diabetes management); and the conclusions (the researchers' findings or results relating to the role of self-compassion in diabetes management, and the subsequent recommendations made on the implementation of interventions).

A narrative synthesis method was used during the search and compilation of the rapid review, as the goal of the proposed research was to synthesize results from various sources into a single document, namely this rapid review (Dobbins, 2017). A narrative synthesis allowed for a complete interpretation of the collected evidence (Garrity et al., 2021). The steps implemented to complete this narrative synthesis step were similar to the three steps presented by Dobbins (2017): the extraction of relevant information, the summation of results, and the formalization of conclusions.

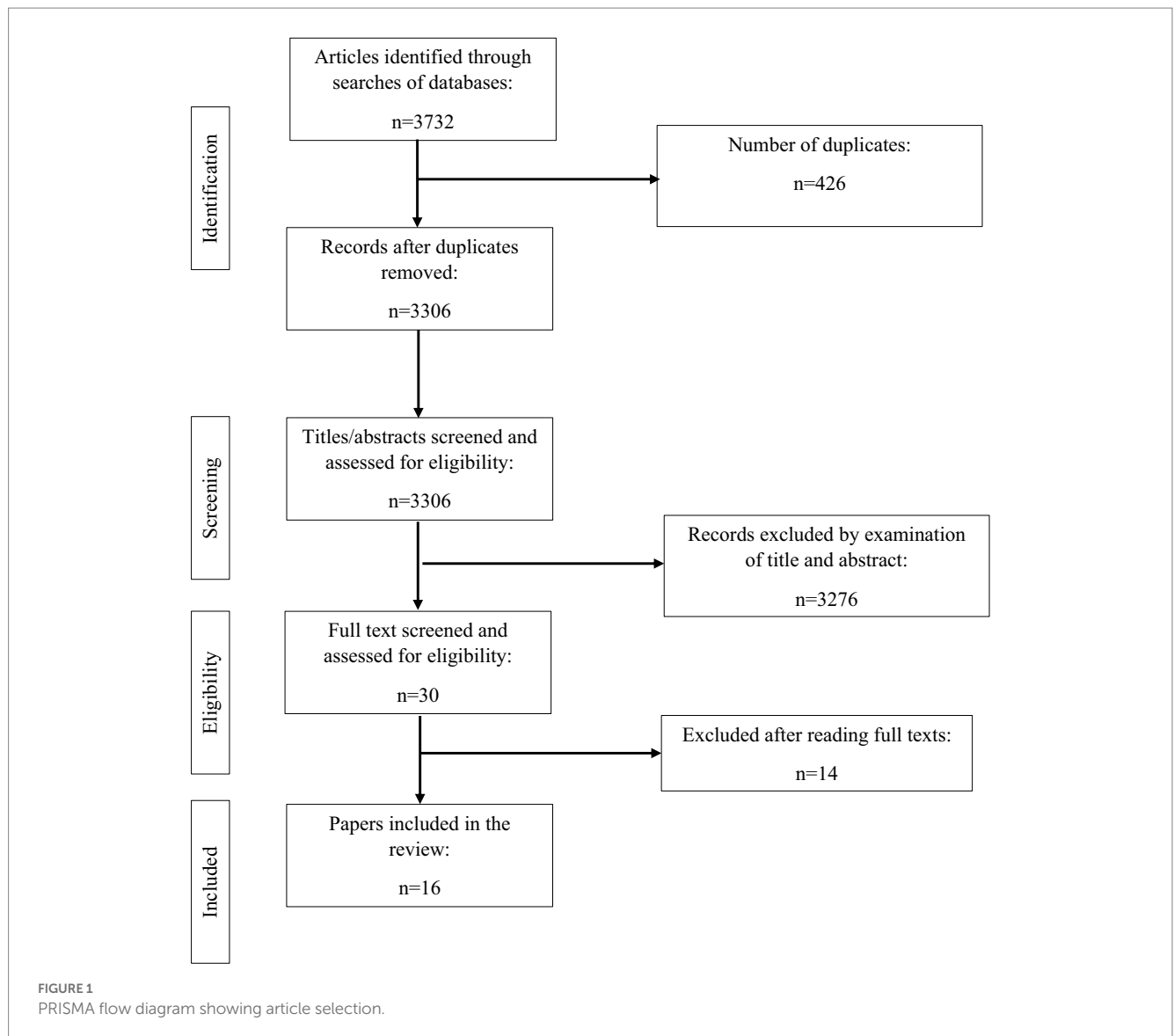
A data extraction table (Table 1), as described by Dobbins (2017), was used to organize, and analyze the data. Using a data extraction table enabled the easy identification of the similarities and differences across the studies, thereby aiding the review of the literature (Dobbins, 2017). The reviewers remained cognizant that rapid reviews run the risk of bias and ensured to the best of their abilities that no relevant information was omitted by continuously consulting with one another (Grant and Booth, 2009).

The identification of applicability and transferability issues

The last step, as identified by Dobbins (2017), was the identification of applicability and transferability issues. Burchett et al. (2013) defined applicability as the ability to implement an intervention in a new setting; while transferability refers to the process of determining if the results or findings of the study would be effective in a different setting than that of the original study. These concepts will be addressed in the results and discussion sections that follow.

Results

In total, 16 publications were included in the final review: four from the USA, three from New Zealand, three from Iran, three from the UK, two from Australia, and one from Poland. Of the publications included, 11 used a cross-sectional design, three used a quasi-experimental research design, and two employed a randomized controlled trial. Three major themes were identified: self-compassion is associated with improved outcomes, self-compassion can be improved through interventions, and there are other factors which influence self-compassion, specifically gender and diabetes duration.



Self-compassion is associated with improved outcomes

In eight of 16 studies, self-compassion was shown to be related to an improvement in regimen adherence and HbA1C levels and an increase in various psychological well-being domains (Ferrari et al., 2017; Jackson, 2018; Tanenbaum et al., 2018; Morrison et al., 2019; Ventura et al., 2019; Rahmani et al., 2020; Akbari et al., 2022; Loseby et al., 2022). One article (Kılıç et al., 2022) did not support this and found that self-compassion did not uniquely predict variables such as depression, anxiety, and quality of life. However, this article identified that a limitation of their study was that data collection was completed during the COVID-19 pandemic, in which participants may have been experiencing increased levels of distress, anxiety, and lower quality of life, due to extraneous variables beyond that of their diabetes (Kılıç et al., 2022).

Compelling evidence from this review indicates that self-compassion is meaningfully associated with more optimal behavioral, clinical, and emotional outcomes in individuals with diabetes (Ferrari et al., 2017;

Morrison et al., 2019; Ventura et al., 2019; Akbari et al., 2022). Ferrari et al. (2017) identified that self-compassion was strongly correlated with an increased sense of psychological well-being and improved HbA1c levels. Self-compassion was also found to be meaningfully associated with more optimal self-care behaviors (Loseby et al., 2022). It is vital to understand this relationship, as improved self-care behaviors have been shown to improve regimen adherence and self-management behaviors which, in turn, reduce HbA1c levels (Ferrari et al., 2017; Jackson, 2018; Rahmani et al., 2020; Loseby et al., 2022).

Many psychological variables were identified in the articles that influence the relationship between self-compassion, improved HbA1c, and psychological well-being. These psychological variables included psychological inflexibility (Kılıç et al., 2022), interpersonal communication (Akbari et al., 2022), and diabetes-related distress and depression (Friis et al., 2015; Whitebird et al., 2017; Kane et al., 2018; Kılıç et al., 2022). Kılıç et al. (2022) identified a negative correlation between self-compassion and psychological inflexibility, meaning that when individuals displayed an increased level of self-compassion, they exhibited less psychological inflexibility or were more psychologically flexible. This is valuable information, as

TABLE 1 Data extraction table.

Article	Country	Aim	Design	Measures	Participants	Main findings	Limitations
Akbari, M., Seydavi, M., Rowhani, N. S., & Nouri, N. (2022). Psychological predictors of treatment adherence among patients with diabetes (types I and II): Modified information-motivation-behavioural skills model. <i>Clinical Psychology & Psychotherapy</i> , 1–13.	Iran	To determine whether there is a difference in the pattern of adherence between patients with types I and type II diabetes (T1D and T2D, respectively). To compare patients with diabetes to determine how they differ, or are similar, in terms of treatment adherence, interpersonal communication between staff and patients, perceived social support, distress intolerance, self-compassion and illness perception.	A cross-sectional, observational study.	Treatment adherence (as measured by the Treatment Adherence for Chronic Disease Questionnaire), interpersonal communication between staff and patients (as measured by the Interpersonal Communication Scale), illness perception (as measured by the Brief Illness Perception Questionnaire), perceived social support (as measured by the Multidimensional Scale of Perceived Social Support), distress intolerance (as measured by the Distress Tolerance Scale), and self-compassion (as measured by the short form of the Self-Compassion Scale).	1,125 participants (475 = T1D, 472 = T2D, 178 = diabetes due to other condition), 33.3 = mean age, 55.02% = women, 55.73% = single, ethnicity not reported, 6.01 years = diabetes duration, HbA1c not reported, and 40.88% = hold a diploma.	Self-compassion and interpersonal communication between staff and patients were significant predictors of treatment adherence among patients with T1D, T2D and diabetes due to other medical conditions. Distress intolerance was a significant predictor of treatment adherence only in patients with T2D. Above and beyond demographic features, self-compassion, interpersonal communication between patients and health care staff, distress intolerance, perceived social support and illness perception were significant predictors of treatment adherence among patients with diabetes.	The cross-sectional and observational nature of findings would not allow for conclusions on causality, temper and findings temporality. Reliance on self-report measurement and lack of a longitudinal follow-up to assess change over time. No data was collected on pharmacological treatments that may have acted as confounding variables. Participants' psychological status may have been affected by the COVID-19 stressor, influencing treatment adherence.
Charzynska, E., Kocur, D., Dzialach, S., & Brenner, R. E. (2020). Testing the indirect effect of type 1 diabetes on life satisfaction through self-compassion and self-coldness. <i>Mindfulness</i> , 11(11), 2,486–2,493.	Poland	To explore the relationship between duration of diabetes, positive and negative components of self-compassion, and life satisfaction.	A cross-sectional, web-based study.	Self-compassion [as measured by the Self-Compassion Scale (SCS)], satisfaction with life [as measured by the Satisfaction with Life Scale (SWLS)], and sociodemographic and diabetes-related measures (as measured by self-report data).	112 participants (112 = T1D, 0 = T2D), 28.29 = mean age, 80.4% = women, 66.67% = intimate relationship, ethnicity not reported, 13.75 years = diabetes duration, HbA1c average not reported, and education level not reported.	Diabetes duration was related to lower self-coldness, but not to self-compassion. Both self-coldness and self-compassion are strongly correlated with life satisfaction. Diabetes duration had a significant indirect effect on life satisfaction through self-coldness, not self-compassion.	Small sample size, limit in generalizability as sample were mostly women, did not control for comorbidity in analysis, design used does not allow for predictions in directions of relationship between variables, use of non-specific measure of self-compassion and not a diabetes-specific one.

(Continued)

TABLE 1 (Continued)

Article	Country	Aim	Design	Measures	Participants	Main findings	Limitations
Ferrari, M., Cin, M. D., & Steele, M. (2017). Self-compassion is associated with optimum self-care behavior, medical outcomes and psychological well-being in a cross-sectional sample of adults with diabetes. <i>Diabetic Medicine</i> , 34(11), 1,546–1,553.	Australia	To investigate the role of self-compassion in diabetes outcomes.	A cross-sectional study.	Demographic information (as measured by self-reported data), medical information (as measured by self-reported HbA1c, duration of diagnosis, type of diagnosis, and most recent reading), self-compassion [as measured by the Self-Compassion Scale-Short Form (SCS-SF)], self-management behavior (as measured by the Diabetes Self-Management Questionnaire) and psychological well-being (as measured by the Well-Being Questionnaire).	310 participants (203 = T1D, 73 = T2D, 28 = Gestational diabetes, 6 = other), 37.6 = mean age, 81.3% = women, 42.9% = married, ethnicity not reported, diabetes duration not reported, 7.7% = HbA1c, and education level not reported.	Self-compassion had the most consistent association with better outcomes, including all forms of self-management behavior, HbA1c levels, and psychological well-being. Internal locus of control was also significantly associated with better well-being and HbA1c outcomes. External locus of control and social support were associated with poorer outcomes.	Challenges to validity of findings as it was an online questionnaire, self-report relies on honesty and diligence of participants, HbA1c was also self-reported or unreported, other relevant psychosocial predictors may have not been included.
Friis, A. M., Johnson, M. H., Cutfield, R. G., & Consedine, N.S. (2015). Does kindness matter? Self-compassion buffers the negative impact of diabetes-distress on HbA1c. <i>Diabetes Spectrum</i> , 28(4), 252–257.	New Zealand	To assess the specific operationalization of negative emotionality that best predicted HbA1c, and to test whether self-compassion would buffer HbA1c in patients with diabetes against the negative effects of distress.	A cross-sectional study.	Symptoms of major depressive disorder (as measured by the PHQ-19), diabetes-specific distress [as measured by the Diabetes Distress Scale 2 (DDS-2)], and self-compassion [as measured by the Self-Compassion Scale (SCS)].	110 participants (67 = T1D, 43 = T2D), 47.6 = mean age, 65.45% = women, relationship status not reported, 73.6% = New Zealand European, 16.7 years = diabetes duration, 8.5% = HbA1c, and education level not reported.	Diabetes-specific distress was a better predictor of HbA1c than depression. Self-compassion moderated the relationship between distress and HbA1c (higher distress predicted higher HbA1c at lower levels of self-compassion).	Self-report measure, participants were self-selected, use of short form measure of DDS-2, directionality cannot be inferred due to research design (cross-sectional), limited ethnic diversity within sample, comorbidities or diabetes complications were not assessed.
Friis, A. M., Johnson, M. H., Cutfield, R. G., & Consedine, N.S. Does kindness matters: A randomized controlled trial of a mindful self-compassion intervention improves depression, distress, and HbA1c among patients with diabetes. <i>Diabetes Care</i> , 39(11), 1963–1971.	New Zealand	To evaluate the effects of self-compassion training on mood and metabolic outcomes among patients with diabetes.	A randomized controlled trial study with an eight-week mindful self-compassion intervention. There was a waitlist control group, and measurements were taken at baseline, at eight-week/postvention, and at a 3 month follow up.	Self-compassion [as measured by the Self-Compassion Scale (SCS)], symptoms of major depressive disorder [as measured by the 9-Item Patient Health Questionnaire (PHQ-9)], diabetes-specific distress [as measured by the 17-Item Diabetes Distress Scale (DDS)], and glycemic control (as measured by HbA1c).	63 participants (46 = T1D, 17 = T2D), 44.37 = mean age, 68.25% = women, relationship status not reported, 73.02% = New Zealand European, 16.84 years = diabetes duration, 8.94% = HbA1c, and education level not reported.	MSC training increased self-compassion and produced statistically and clinically significant reductions in depression and diabetes distress. These results were maintained at the three-month follow-up. Participants in the intervention group also averaged a clinically and statistically meaningful decrease in HbA1c between baseline and follow-up. No changes were present in wait-list control group.	Findings are generalizable only to those who volunteered for the RCT, more than one half of the sample presented with mood problems, absence of an active control group.

TABLE 1 (Continued)

Article	Country	Aim	Design	Measures	Participants	Main findings	Limitations
Jackson, K. (2018). <i>Exploring the role of self-compassion in adolescent wellbeing and type 1 diabetes management</i> . [Doctoral dissertation]. University of East Anglia.	UK	To examine the association between self-compassion and subjective wellbeing, and to investigate self-compassion as a correlate of effective disease management in adolescents with type 1 diabetes, as indicated by measures of glycemic control and regimen adherence	A quantitative, cross-sectional study.	Glycemic control (as measured by HbA1c), diabetes regimen adherence (as measured by the 14-Item Self-Care Inventory), self-compassion [as measured by the Self-Compassion Scale (SCS)], emotional distress (as measured by the Paediatric Index of Emotional Distress [PI-ED]), critical/intrusive parental diabetes behavior [as measured by the Diabetes Family Behavior Checklist (DFBC)], demographics and diabetes information (as measured by self-reported data).	52 participants (52 = T1D, 0 = T2D), 14.87 = mean age, 44.2% = women, relationship status not reported, ethnicity not reported, 7.06 years = diabetes duration, 8.2% = HbA1c, and education level not reported.	Self-compassion was found to predict improved glycaemic control and regimen adherence, outcomes linked to a reduced risk of short- and long-term health complications. Impaired self-soothing was also discovered to mediate the relationship between emotional distress and poorer diabetes regimen adherence.	Scarcity of evidence relevant to research question, shortage of experimental evidence (review was limited to cross-sectional), other moderators need to be accounted for, more cross-cultural research is required.
Kane, N. S., Hoogendoorn, C. K., Tanenbaum, M. L., & Gonzalez, J. S. (2018). Physical symptom complaints, cognitive emotion regulation strategies, self-compassion and diabetes distress among adults living with Type 2 diabetes. <i>Diabetic Medicine</i> 35(12), 1,671–1,677.	USA	To examine illness burden, and positive and negative ways of thinking and relating to oneself at times of stress, as independent correlated of diabetes distress, cross-sectionally and longitudinally.	A cross-sectional and longitudinal study.	Physical symptom burden [as measured by the Illness Perception Scale-Revised (IPQ-R)], cognitive emotion regulation strategies [as measured by the 36-Item Cognitive Emotion Regulation Questionnaire (CERQ)], and self-compassion [as measured by the 26-Item Self-Compassion Scale (SCS)].	120 participants (0 = T1D, 120 = T2D), mean age not reported, 64.2% = female, relationship status not reported, 61.7% = black, 12.9 years = diabetes duration, 8.0% = HbA1c, and 32.5% = some college experience.	Baseline diabetes distress was associated with greater use of negative cognitive emotion regulation strategies, a greater tendency towards self-criticism, self-judgement and over-identification, and a greater physical symptom burden. Baseline physical symptoms and negative cognitive emotion regulation were independently associated with baseline diabetes distress. Baseline physical symptoms and negative aspects of self-compassion significantly predicted diabetes distress over 3 months. Positive aspects of cognitive emotion regulation and self-compassion were not independently associated with diabetes distress cross-sectionally or longitudinally.	A cross-sectional design limits the ability to make causal inferences; two time points over 3 months were not sufficient to examine change over time; there is a degree of construct and measurement overlap between cognitive emotional regulation and self-compassion which may have limited the ability to identify independent roles for these factors in relation to diabetes distress; did not differentiate among types of physical symptoms and those attributed to diabetes or other causes; small sample size.

(Continued)

TABLE 1 (Continued)

Article	Country	Aim	Design	Measures	Participants	Main findings	Limitations
Karami, J., Rezaei, M., Karimi, P., & Rafiee, Z. (2018). Effectiveness of self-compassion intervention training on glycemic control in patients with diabetes. <i>Journal Kermanshah University Medical Sciences</i> , 22(2).	Iran	To investigate the effectiveness of self-compassion training on glycemic control in patients with type II diabetes.	A quasi-experimental study with an eight-session self-compassion training, with a pretest-posttest design and a control group.	Demographic details (as measured by self-reported information) and blood glucose level (as measured by a self-reported blood glucose reading).	20 participants (0 = T1D, 20 = T2D), 43.98 = mean age, gender not reported, relationship status not reported, ethnicity not reported, diabetes duration not reported, HbA1c not reported and education level not reported.	After the intervention, the mean score of the experimental group were significantly lower than that of the control group. Self-compassion training is effective in glycemic control in patients with diabetes.	None are mentioned in the article.
Kilic, A., Hudson, J., Scott, W., McCracken, L. M., & Hughes, L. D. (2022). A 12-month longitudinal study examining the shared and unique contributions of self-compassion and psychological inflexibility to distress and quality of life in people with Type 2 Diabetes. <i>Journal of Psychosomatic Research</i> , 155.	UK	To examine the shared and unique utility of self-compassion and psychological flexibility in predicting distress and quality of life (QoL) outcomes over time.	An online longitudinal study with measures taken at baseline; and six and 12 months follow-ups.	Demographic information and health status (as measured by self-report questionnaire), depressive symptoms [as measured by Whooley Questions and the Patient Health Questionnaire (PHQ-8)], anxiety symptoms [as measured by the Generalized Anxiety Disorder-7 (GAD-7)], diabetes distress [as measured by the Problem Areas in Diabetes (PAID)], quality of life (as measured by the EQ-5D-31 Health Questionnaire Visual Analogue Scale), self-compassion [as measured by the Self-Compassion Scale (SCS)], and psychological inflexibility [as measured by the Acceptance and Action Questionnaire-2 (AAQ-2)].	173 participants (0 = T1D, 173 = T2D), 58.3 = mean age, 60.1% = women, 57.9% = living with someone, 92.5% = white, 10.18 years = diabetes duration, HbA1c not reported, and education level not reported.	Significant negative correlations between self-compassion and psychological inflexibility. Both had significantly large correlations with distress, but not QoL over time. Psychological inflexibility predicted depression, anxiety, and QoL; while self-compassion did not uniquely predict any of the outcomes.	Low completion rates and small sample size; data collection was completed during the COVID-19 pandemic and so participants may have been experiencing higher levels of distress and lower QoL due to this; self-reporting bias; only a limited number of variables were controlled for; findings may not generalize.

(Continued)

TABLE 1 (Continued)

Article	Country	Aim	Design	Measures	Participants	Main findings	Limitations
Loseby, P., Schache, K., Cavadino, A., Young, S., Hofman, P. L., & Serlachius, A. (2021). The role of protective psychological factors, self-care behaviours, and HbA1c in young adults with type 1 diabetes. <i>Behavioral Aspects of Diabetes</i> , 23(3), 380–389.	New Zealand	To investigate whether protective psychological factors in young adults with type 1 diabetes are associated with more optimal self-care behaviors and HbA1c, and to explore possible mediators between protective psychological factors and HbA1c.	A cross-sectional study.	Demographic information and HbA1c (as measured by the National Health Index), optimism [as measured by the revised version of the Life Orientation Test (LOT-R)], anxiety and depression [as measured by the Hospital Anxiety and Depression Scale (HADS)], self-compassion [as measured by the Self-Compassion Scale-Short Form (SCS-SF)], positive efficacy expectancies (as measured by the Generalized Self-Efficacy Scale), stress [as measured by the 10-item Perceived Stress Scale (PSS-10)], and self-care behaviors [as measured by the Self-Care Inventory-Revised Version (SCI-R)].	113 participants (113 = T1D, 0 = T2D), 20 = mean age, 53.1% = women, marital status not reported, 65% = New Zealand European, 10.68 years = diabetes duration, 9.1% = HbA1c, and education level not reported.	Higher positive efficacy expectancies were associated with more optimal HbA1c and more optimal self-care behaviours. Higher levels of self-compassion were associated with more optimal self-care behaviors. Self-care behaviors mediated the relationship between all the protective psychological factors and more optimal HbA1c, and lower stress also mediated relationship between higher self-compassion and more optimal HbA1c.	No inclusion of measures of socioeconomic status which is known to be strongly associated with diabetes outcomes; cannot assume causality due to cross-sectional design.
Morrison, A. E., Zaccardi, F., Chatterjee, S., Brady, E., Doherty, Y., Robertson, N., Hadjiconstantinou, M., Daniels, L., Hall, A., Khunti, K., & Davies, M. J. (2019). Self-compassion, metabolic control and health status in individuals with type 2 diabetes: A UK observational study. <i>Experimental and Clinical Endocrinology & Diabetes</i> , 129(06), 413–419.	UK	To explore levels of self-compassion in individuals with type 2 diabetes (T2DM) and their association with levels of depression, diabetes-related distress and glycaemic control.	A cross-sectional study.	Demographic details and medical information/history (as measured by self-reported data and blood results), self-compassion [as measured by the Self Compassion Scale (SCS)], depression symptoms [as measured by the Patient Health Questionnaire (PHQ-9)], and diabetes-specific-distress [as measured by the Diabetes Distress Scale (DDS-17)].	176 participants (0 = T1D, 176 = T2D), 66 = mean age, 31.8% = female, relationship status not reported, 83% = white, 11 years = diabetes duration, 7.3% = HbA1c and education level was not reported.	Higher levels of self-compassion and lower levels of depressive symptoms were associated with significantly better long-term diabetes control.	Small sample size of only patients with T2DM.

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TABLE 1 (Continued)

Article	Country	Aim	Design	Measures	Participants	Main findings	Limitations
Rahmani, S., Mansoobifar, M., Seirafi, M., Ashayeri, H., & Bermas, H. (2020). Effectiveness of family empowerment therapy based on self-compassion on self-care and glycosylated hemoglobin in female patients with type 2 diabetes mellitus: A randomized controlled clinical trial. <i>Women's Health Bulletin</i> , 7(2), 33–42.	Iran	To determine the effectiveness of family empowerment therapy based on self-compassion on self-care and glycosylated hemoglobin in female patients with type 2 diabetes mellitus.	A randomized controlled clinical trial with a control group, pre-test, post-test and follow-up measurements. A family empowerment therapy based on self-compassion was used as an 8 weeks intervention program.	Self-care [as measured by the Summary of Diabetes Self-Care Activities (SDSCA)], and glycosylated hemoglobin (as measured by HbA1c).	60 participants (0 = T1D, 60 = T2D), mean age not reported, 100% = women, 57.7% = married, ethnicity not reported, diabetes duration not reported, 6.79% = HbA1c, and 57.7% = Bachelor's degree.	Significant difference after the intervention between the experimental and control groups regarding self-care and HbA1c. Comparison of means indicates the effectiveness of treatment in improving self-care and reducing HbA1c.	Small sample size; use of self-reported instruments; sample limited to female patients.
Ringdahl, B. A. (2019). <i>Man your meter: The mediating roles of self-compassion and self-efficacy between gender role conflict and diabetes self-care, diabetes distress, and glucose control in men with diabetes</i> . [Doctoral dissertation]. University of St. Thomas.	USA	To examine self-efficacy and self-compassion as mediators that further explain how men's levels of gender role conflict may subsequently influence diabetes-related health outcome variables.	A quantitative, cross-sectional, survey study.	Demographic information (as measured by a self-report questionnaire), gender role conflict [as measured by the 37-Item Gender Role Conflict Scale (GRCS)], depression [as measured by the 21-Item Beck Depression Inventory-II (BDI-II)], self-compassion [as measured by the Self-Compassion Scale (SCS)], self-efficacy [as measured by the 10-Item self-administered General Self-Efficacy Scale (GSES)], diabetes distress [as measured by the Diabetes Distress Scale-17 (DDS-17)], diabetes self-management [as measured by the 16-Item Diabetes Self-Management Questionnaire (DSMQ)], glycemic management (as measured by HbA1c), and covariates (as measured by self-reported information).	146 participants (21 = T1D, 125 = T2D), 54.69 = mean age, 100% = men, 59.3% = married, 65.8% = white, 12.40 years = diabetes duration, 7.63% = HbA1c, and 28.1% = some college credit but no degree.	Multiple regression analyses found that gender role conflict correlated with measures of diabetes self-care and diabetes distress and that self-compassion mediated the relationship between gender role conflict and diabetes-related health outcomes.	Due to design of the study, the development and maintenance of GRC in the context of the lives of the participants cannot be fully understood; GRCS measures a limited number of behavioral domains; data was not randomized; self-reported measures; sample size was small.

(Continued)

TABLE 1 (Continued)

Article	Country	Aim	Design	Measures	Participants	Main findings	Limitations
Tanenbaum, M. L., Adams, R. N., Gonzalez, J. S., Hanes, S. J., & Hood, K.K. (2018). Adapting and validating a measure of diabetes-specific self-compassion. <i>Journal of Diabetes and Its Complications</i> , 32(2), 196–202.	USA	To adapt the Self-Compassion Scale and validate it for a diabetes-specific population.	A cross-sectional study.	Diabetes and demographic characteristics (as reported by self-report), convergent validity, diabetes empowerment [as measured by the 8-Item Diabetes Empowerment Scale-Short Form (DES-SF)], diabetes distress [as measured by the 28-Item Diabetes Distress Scale for Adults with T1D (DDS-T1)], glycemic control (as measured by HbA1c values), and discriminant validity: diabetes numeracy (as measured by the Diabetes Numeracy Test (DNT-5) which refers to the ability to interpret diabetes-related numbers and use these numbers to guide diabetes management tasks).	542 participants (542 = T1D, 0 = T2D), 41.4 = mean age, 65% = women, marital status not reported, 96.8% = white, 23.3 years = diabetes duration, 7.3% = HbA1c, and education level not reported.	Higher SCS-D was associated with less distress, greater empowerment, and lower HbA1c, and was not associated with numeracy.	The sample may not fully represent the larger population of adults with T1D; HbA1c data was only available for one-third of the population; the relationship may not be generalizable; the sample had high rates of device use.
Ventura, A. D., Nefs, G., Browne, J. L., Friis, A. M., Pouwer, F., & Speight, J. (2018). Is self-compassion related to behavioural, clinical, and emotional outcomes in adults with diabetes? Results from the second diabetes MILES - Australia (MILES-2) study. <i>Mindfulness</i> , 10(7), 1,222–1,231.	Australia	To determine the associations between self-compassion and diabetes-related health behaviors and clinical outcomes, and emotional health outcomes.	A cross-sectional study.	Self-compassion [as measured by the Self-Compassion Scale-Short Form (SCS-SF)], diabetes self-management behaviors [as measured by the Summary of Diabetes Self-Care Activities Questionnaire (SDSCA)], emotional outcomes [as measured by the 20-Item Problem Areas in Diabetes scale (PAID)], demographic and clinical characteristics (as measured by self-reported information, including HbA1c).	1907 participants (889 = T1D, 1,018 = T2D), 53.01 = mean age, 50% = women, relationship status not reported, ethnicity not reported, 14.90 years = diabetes duration, 7.3% = HbA1c, and education level not reported.	Self-compassion was significantly lower among those with severe diabetes distress or moderate-to-severe symptoms of depression and anxiety. Self-compassion was significantly associated with all specified outcomes, with the strongest association observed among the emotional outcomes. Self-compassion was found to be meaningfully associated with more optimal behavioral, clinical, and emotional outcomes in adults with diabetes.	Use of self-reported data; use of short-form of the self-compassion scale as opposed to the full version; use of a measure that was validated and adapted in the USA.

(Continued)

TABLE 1 (Continued)

Article	Country	Aim	Design	Measures	Participants	Main findings	Limitations
Whitebird, R. R., Kreitzer, M. J., Vazquez-Benitez, G., & Enstad, C. J. (2017). Reducing diabetes distress and improving self-management with mindfulness. <i>Social Work in Health Care</i> , 57(1), 28–65.	USA	To determine whether mindfulness-based stress reduction could reduce diabetes distress and improve management.	A one-arm pilot study in which an 8 week mindfulness-based stress-reduction (MSSBR) program intervention was implemented. Measures were taken at baseline and post-intervention.	Demographics (as measured by self-reported data), stress [as measured by the Perceived Stress Scale (PSS)], coping [as measured by the short-form version of the Coping Strategies Inventory (CSI-SF)], mental health [as measured by the Short-Form-12 Health Survey (SF-12)], social support [as measured by the Medical Outcomes Study Social Support Survey (MOS)], self-compassion [as measured by the short-form of the Self-Compassion Scale (SCS-SF)], diabetes-related distress [as measured by the Problem Areas in Diabetes Questionnaire (PAID)], self-management and self-efficacy [as measured by the Diabetes Empowerment Scale (DES)], and HbA1c (as measured by medical records).	31 participants (0 = T1D, 31 = T2D), 56.6 = mean age, 67.4% = women, 62.3% = married, 71% = white, diabetes duration not reported, 9.2% = HbA1c, and 38.7% = some post-secondary education.	Participants showed significant improvement in diabetes-related distress, psychological self-efficacy, and glucose control. Significant improvements in depression, anxiety, stress, coping, self-compassion and social support were also found.	As a single-arm pilot study, the design precludes causal inference, and only provides preliminary data to address the question of the effectiveness of MBSR. Small sample size and predominantly female with limited representation of minorities.

psychological inflexibility was also shown to predict other psychological variables such as depression, anxiety, and an individual's sense of the quality of their life (Kılıç et al., 2022). Furthermore, Akbari et al. (2022) identified how interpersonal communication between staff and patients, self-compassion, and distress intolerance all influenced their treatment adherence.

Another confounding relationship identified in five articles was between self-compassion, diabetes distress/depression and HbA1c (Friis et al., 2015; Whitebird et al., 2017; Tanenbaum et al., 2018; Morrison et al., 2019; Ventura et al., 2019). Self-compassion was found to mediate the relationship between diabetes distress/depression and HbA1c in that higher levels of self-compassion were related to less distress/depression and lower HbA1c readings (Friis et al., 2015; Tanenbaum et al., 2020). This was reported to be significant as diabetes-specific distress/depression was a better predictor of HbA1c levels than general psychological depression (Friis et al., 2015).

Self-compassion can be improved through interventions

Four studies included in this review reported on interventions in the form of self-compassion training (Friis et al., 2016; Whitebird et al., 2017; Karami et al., 2018; Rahmani et al., 2020). All the studies found a meaningful increase in glycemic control and a reduction in HbA1c levels. Friis et al. (2016) conducted an eight-week mindful self-compassion (MSC) intervention program in which the standard MSC protocol was strictly adhered to. MSC interventions aim to develop the cognitive, behavioral, and physical capacities to soothe and comfort oneself when distressed, using formal meditation and self-compassion practices (Friis et al., 2016). After conducting the interventions, the authors reported having found an increased level of self-compassion and a clinically significant reduction in depression, diabetes-related distress, and HbA1c levels (Friis et al., 2016). The authors confirmed these results using ANOVA testing.

In an eight-week mindfulness-based stress reduction (MBSR) program conducted by Whitebird et al. (2017), significant improvements in diabetes-related distress, glucose control, self-compassion, and other positive psychological characteristics were found. According to the authors, these findings suggest that MBSR may be an effective method for assisting individuals living with diabetes in better managing their diabetes and overall mental health.

An intervention by Karami et al. (2018) offered eight sessions of group-based self-compassion training to an experimental group, while the control group did not receive any training. Post-intervention, the mean blood glucose levels of the experimental group were reported to be significantly lower than that of the control group (with $p < 0.001$) (Karami et al., 2018). Therefore, it was concluded that self-compassion training is an effective way of increasing glycemic control in a group of people with diabetes (Karami et al., 2018).

On a more holistic level, Rahmani et al. (2020) conducted an eight-week family empowerment therapy intervention, based on self-compassion, among an experimental group. The control group continued to receive their usual hospital treatments during the therapy sessions. After conducting an analysis of variance, the authors found a significant difference between the experimental and control groups regarding their self-care and HbA1c levels post-intervention; further illustrating the effectiveness of self-compassion-based training on diabetes-related health outcomes (Rahmani et al., 2020).

Other factors influencing self-compassion

Gender and diabetes duration were identified as factors that should be considered when investigating the relationship between self-compassion and diabetes management.

Gender

Of the studies in this review, eight included a sample of more than 65% women (Friis et al., 2015, 2016; Ferrari et al., 2017; Whitebird et al., 2017; Tanenbaum et al., 2018; Ringdahl, 2019; Charzyńska et al., 2020; Rahmani et al., 2020; Tanenbaum et al., 2020). Given that previous research has indicated that women tend to show lower levels of self-compassion than their male counterparts, the results of the studies should be interpreted with caution as they may have been influenced purely by the composition of the sample (Yarnell et al., 2018; Ferrari et al., 2022).

Ringdahl (2019) recognized the influence that gender could have on self-compassion and conducted an all-male study investigating the relationship between gender role conflict, self-care behaviors, and diabetes distress. This study concluded that self-compassion mediates the effects of gender role conflict on diabetes-related health outcomes (Ringdahl, 2019).

Diabetes duration

Diabetes duration was not reported in all the studies included in this review; however, of the ones that did report on it, 10 of them had a sample consisting of people that had been living with diabetes for a period of 10 years or longer (Friis et al., 2015, 2016; Kane et al., 2018; Tanenbaum et al., 2018; Morrison et al., 2019; Ringdahl, 2019; Ventura et al., 2019; Charzyńska et al., 2020; Kılıç et al., 2022; Loseby et al., 2022).

This is of note as Charzyńska et al. (2020) reported on the effects that diabetes duration has on self-coldness (a negative aspect of self-compassion). It was concluded that the longer an individual had diabetes (increased diabetes duration), the lower their levels of self-coldness (Charzyńska et al., 2020). However, they also found that diabetes duration had no impact on an individual's levels of self-compassion.

Discussion

This rapid review's main objective was to determine self-compassion's role in diabetes and its management. From the publications reviewed in this study, it can be concluded that although many psychological variables influence the role that self-compassion plays in the management of diabetes, it may provide a potential avenue through which psychological well-being could improve, regimen adherence could be increased, and HbA1c could be lowered.

Diabetes remains one of the major chronic conditions globally, affecting at least 34 million people in the United States alone (NCCDPHP, 2021). Effective diabetes management involves a healthy eating plan, engaging daily in some sort of physical activity, medication adherence, and the close management of blood glucose levels; all of which are emotionally, physically, and cognitively demanding activities (Roglic, 2016; Boggiss et al., 2020).

Given that a fundamental component of diabetes management is being able to learn from mishaps and being able to forgive oneself

when failing to meet all aspects of daily management; it is clear that a concept such as self-compassion, in which treating oneself with kindness and concern while enduring negative events or experiences, may provide an important psychological cushion (Allen and Leary, 2010). This was made evident in the literature that concluded that self-compassion could improve levels of diabetes-related distress/depression, interpersonal communication, and psychological inflexibility (Friis et al., 2015, 2016; Whitebird et al., 2017; Kane et al., 2018; Morrison et al., 2019; Ventura et al., 2019; Tanenbaum et al., 2020; Akbari et al., 2022; Kılıç et al., 2022).

Diabetes-related distress/depression is a broad term used to describe the distress, negative mood, and emotional burden associated with managing diabetes daily (Friis et al., 2015; Kane et al., 2018). It is important to investigate this variable as when an individual with diabetes is experiencing this distress/depression, they are more likely to engage in self-judgement and self-criticism when they experience poor glucose control, which often leads to their taking fewer actions to manage their diabetes, further exacerbating the symptoms of diabetes-related distress/depression (Friis et al., 2015; Whitebird et al., 2017; Kane et al., 2018). A promising finding in the literature was identifying self-compassion as a potential resource that can be used to break this downward spiral. The possibility of self-compassion being a mediating factor in this relationship between diabetes-specific distress/depression, glycemic control, and HbA1c creates an optimistic outlook on future treatment plans (Whitebird et al., 2017; Morrison et al., 2019; Ventura et al., 2019).

Interpersonal communication and psychological inflexibility were significant predictors of treatment adherence (Akbari et al., 2022; Kılıç et al., 2022). Being able to effectively communicate with persons with diabetes is of the utmost importance. If these individuals better understand their condition and the actions required to improve their HbA1c, they are more likely to engage in the behavioral changes required for more optimal glucose control. Furthermore, psychological flexibility, the opposite of psychological inflexibility, can be defined as a person's capacity to deal with, accept, and adapt to challenging circumstances (Kılıç et al., 2022). The management of diabetes is nothing short of a challenging circumstance that an individual must adapt and embrace. Therefore, this positive psychology construct may provide another avenue through which diabetes management may be improved.

Furthering the discussion of positive psychology constructs, many studies included in this review linked self-compassion with other tenets of positive psychology, such as mindfulness, self-care, self-efficacy, and family empowerment (Whitebird et al., 2017; Rahmani et al., 2020; Loseby et al., 2022). This combination of multiple positive psychology constructs makes it difficult to infer if self-compassion alone is the reason for the outcomes described in the literature. However, the fact that these constructs can be improved through interventions provides a promising outlook for future research and management plans, as all interventions included in this review reported a meaningful improvement in diabetes management and HbA1c levels following the intervention (Friis et al., 2016; Whitebird et al., 2017; Karami et al., 2018; Rahmani et al., 2020).

Factors identified that might influence self-compassion's role in diabetes management included gender and diabetes duration (Ringdahl, 2019; Charzyńska et al., 2020). Given that self-compassion is known to be significantly lower in women than in men and that most of the publications included in the review mainly consisted of female populations, caution should be exercised when interpreting the findings of these studies

(Yarnell et al., 2018; Ferrari et al., 2022). Ringdahl (2019) identified that gender role conflict may influence any potential relationship identified between self-compassion and diabetes-related health outcomes, of which diabetes management is one. Thus, it is necessary to consider such a factor when investigating the role of self-compassion in managing diabetes. Furthermore, Charzyńska et al. (2020) state that diabetes duration influenced levels of self-coldness, a negative aspect of self-compassion. Most of the publications in this study consisted of participants who had been living with diabetes for a significant period. Given that the longer an individual has diabetes, the more likely they are to understand its causes, course, and treatment, it must be considered that HbA1c levels and glycemic control would not be truly representative of newly diagnosed individuals that are still trying to understand their diabetes and how to manage it effectively. Therefore, it would be beneficial to identify when, in the patient's diagnosis, self-compassion training would be the most effective; and to identify if an individual's gender influences how receptive they are to self-compassion interventions and engaging in self-compassionate acts.

Strengths of this review study include the extensive nature of the literature searches, including the most relevant data sources, and using research specialists. Furthermore, many of the studies identified were able to report on changes related to the pre-to-post implementation of their intervention.

The limitations of this study include that 11 of the 16 identified articles employed a cross-sectional design in which causality and lack of a longitudinal follow-up restrict the interpretations that could be made. Additionally, the surplus of quantitative studies could be considered a limitation as the individual's voice is lost, and we need to get a rich sense of the individual's perspective and beliefs on the topic under investigation. Another limitation is the range of countries represented in this rapid review (USA, New Zealand, Iran, UK, Australia, and Poland). The results could likely be generalized to other countries; however, more South American, and African-based publications need to be published. Therefore, it is questionable whether these findings would be applicable in a developing context and whether similar outcomes or results would be found among these populations.

Although there appeared to be sufficient literature available, few studies investigated the direct causal relationship between self-compassion and diabetes management and, instead, studied a variety of factors which could influence diabetes management. Therefore, it is recommended that further research is conducted to ascertain if there is a direct causal relationship between self-compassion and diabetes management, as suggested by current research available.

The articles in this review frequently referred to diabetes-related health outcomes or improved psychological outcomes, but few gave information on how these individuals manage their diabetes. These diabetes management behaviors would influence all the variables of interest in these studies, and this focus is missing as only outcomes are reported, not the processes. Therefore, future research must focus on the mechanisms and processes by which these improvements are made.

Of note is the abundance of women in the samples of the publications identified in this review and the use of self-reporting HbA1c levels (Friis et al., 2016; Ferrari et al., 2017; Whitebird et al., 2017; Kane et al., 2018; Karami et al., 2018; Tanenbaum et al., 2018; Ringdahl, 2019; Ventura et al., 2019; Charzyńska et al., 2020; Rahmani et al., 2020). It is vital that future research is conducted in which a more representative sample is used and that more reliable forms of

HbA1c data are used, as participants may have over- or under-reported their HbA1c levels to prevent prejudice or stigma.

Lastly, this promising example of a positive psychology perspective, namely self-compassion, in diabetes and its management encourages future research into the role positive psychology may play in managing chronic illnesses such as diabetes.

Conclusion

This review identified 16 publications in which the relationship between self-compassion and diabetes management was investigated. Self-compassion was found to be associated with improved outcomes in regimen adherence, HbA1c levels, and psychological well-being. However, many psychological variables were identified that mediate this relationship. It was valuable to have identified that self-compassion can be improved through interventions. Multiple publications implemented various programs with the main aim of increasing the participant's level of self-compassion. The fact that these programs were successful creates a promising outlook for future studies to implement the same approach. Other factors, such as gender and diabetes duration, were also identified as influencing self-compassion among individuals. Further research is needed in which extraneous factors and variables are controlled to ensure that self-compassion does in fact influence an individual's diabetes management. Based on the publications found in this review, the effect of self-compassion on diabetes management looks promising.

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Author contributions

CS acted as the primary reviewer and ED as the secondary reviewer. CS and ED were involved in the selection and appraisal of the literature. CS conceptualized the study, reviewed the literature, coded the data, and wrote the final research report. ED supervised the rapid review process and acted as the co-coder of the data. All authors contributed to the article and approved the submitted version.

Acknowledgments

We, the authors, would like to thank Gerda Beukman for her support with the literature searches and Vicki Koen for acting as a third reviewer and providing objective resolutions when needed.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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OPEN ACCESS

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RECEIVED 30 November 2022

ACCEPTED 01 June 2023

PUBLISHED 21 June 2023

CITATION

Denney F (2023) "Get on with it. Cope." The compassion-experience during COVID-19 in UK universities. *Front. Psychol.* 14:1112076. doi: 10.3389/fpsyg.2023.1112076

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"Get on with it. Cope." The compassion-experience during COVID-19 in UK universities

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Introduction: The COVID-19 pandemic caused major disruption to all sectors including higher education during the years of 2020 and 2021, thus providing a window into how different types of suffering can combine and the role of compassion in alleviating pain. Higher education within the United Kingdom provides a case example in this study, but the lessons about compassion are transferable to other contexts, particularly those in the neoliberal public sector. The impact of the pandemic period on teaching in universities has been well documented but there has been far less written about the wider experiences of staff who worked through this period, their suffering and the extent of compassion within their work lives.

Methods: 29 interviews were conducted and individuals were invited to talk through the story of their pandemic experiences from March 2020 to the interview date of December 2021. Storytelling is a common method in organization studies and, although research into compassion in organizations is nascent, this method has been used in other studies.

Results and discussion: Previous research has examined organizational compassion in short periods of crisis and this study therefore provides a contrasting perspective on how compassion shifts over a longer period of suffering. A distinction is drawn in this study for the first time between "formalized" compassion processes in the organization which structurally prioritized compassion for students over that of staff, and "informal" compassion shown between staff to each other and between students and staff. The more that formalized compassion was evident, the less apparent it was in interpersonal interactions due to staff wellbeing being compromised and a systemic failure to recognize the dependence of student compassion on the wellbeing of staff. The findings therefore lead to theorizing that although neoliberal universities are perceived as being full of organizational neglect, compassion was structurally embedded for students but at the expense of staff.

KEYWORDS

compassion, higher education, public sector, leadership, education, COVID

1. Introduction

The COVID-19 pandemic caused major disruption to all sectors including higher education during the years of 2020 and 2021. As the world returns to a pre-pandemic way of living, it is important to harness any lessons learned during this time. The pandemic period provided a unique opportunity to study compassion in organizations as it brought to the fore enormous suffering through the illness itself combined with insights into employees' living conditions at the times of lockdowns. Kanov (2021) refers to two distinct types of suffering—that which is inevitable and experienced as part of the human experience, and that which is avoidable and can be caused by the environment within which we work. The COVID-19 pandemic provided a window into how these types of suffering can combine and the role of compassion in mediating the suffering—or in exacerbating it.

Globally, higher education at the time of the pandemic was thrown into disarray and much has been written about the immediate pivot to online teaching. This is, however, only one aspect of working in universities and less research has focused on the wider experiences of those working in higher education during 2020 and 2021. Much can be learned about compassion during this time, to identify what would be useful for the higher education sector to learn in terms of compassionate interactions between staff and the extent to which compassionate leadership is needed. As is written elsewhere (c.f. Waddington, 2016, 2021; Denney, 2020a, 2021a,b) neoliberalism and market approaches to higher education have contributed to a compassion deficit in universities and an increase in staff and student suffering. COVID-19 was a period where everyone was experiencing stress and uncertainty and where the working from home situation was less than ideal. As such, COVID-19 provided a specific timeframe within which to study compassion and to identify any changes throughout this period. The study reported here identifies how compassionate behavior changed throughout 2020 and 2021, the experiences of those working in UK higher education at the time, how they were affected by compassion, or a lack thereof, and the reasons for what was happening. This is in contrast to previous studies of compassion in crisis, where the periods of crisis have been far shorter (Dutton et al., 2006; Simpson et al., 2015). It also identifies how university leadership was perceived during the same period and the degree to which compassionate leadership was experienced by staff at the various universities in the sample.

Although the focus of this study is not on stress and work productivity, it is important to relate the experiences of those working in higher education to this wider context. Work-related stress is one of the biggest causes of employee absenteeism in the UK and the Health and Safety Executive (HSE) estimates that 17 million days of work were lost in 2021/22 due as a result (<https://press.hse.gov.uk/2022/11/23/hse-publishes-annual-work-related-ill-health-and-injury-statistics-for-2021-22/>). The development of neoliberal ideologies in the higher education sector has led to the application of practices more generally found in capitalist industries, with a focus on bureaucratic procedures rather than education (Bush, 2018) and a preponderance of targets, key performance indicators and market economics. Worline and Dutton (2017) identify some of the causes of workplace suffering as being underappreciated and undervalued, not having control over their workload and feeling that their work lacks meaning and these are known factors related to stress in the workplace that can impact negatively on productivity. Although academics report a reasonable level of control over their work (Kinman and Jones, 2008), the THE University Workplace Survey of 2016 found that academics feel exploited and ignored by management, thus indicating a considerable level of suffering. In any workplace context it is therefore important to understand the sources of stress and suffering and to be able to identify how compassion can help to mitigate this.

Overall, there is much that can be learned about compassionate behavior in organizations from the narratives in this study. Compassionate leadership needs to be encouraged and developed as part of management training, particularly around how communications can be perceived by staff and how they may differ from local behaviors. Individual acts of compassion between

staff members and between staff and students were more common throughout the pandemic period, and universities need to take the opportunity for storytelling from this period to provide examples of how compassion can have a big impact on wellbeing and motivation. Furthermore, for the first time this study provides an insight into how compassion ebbs and flows during a long period of intense stress, particularly when there are attempts to embed compassion in policies for one community group over another. The study provides an insight into the compassionate interactions between different groups and There are currently no examples of higher education institutions providing post-pandemic opportunities for staff and students to share their experiences and recover collectively from the impact of lockdowns, yet storytelling is known to enable staff to bond together through shared emotions (Czarniawska and Joerges, 1997; Simpson et al., 2020). I therefore recommend that this would be an opportune moment for universities to invest in the mental health and wellbeing of their communities by providing opportunities to share collective experiences in psychologically safe spaces and thereby contribute to the creation of healthier universities for the future.

2. Background

2.1. UK universities prior to COVID-19

Prior to COVID-19, UK universities, in common with many of their counterparts in other developed countries, were experiencing enormous challenges as a result of being part of a globally marketized environment. In the UK, there were moves toward making higher education a free(ish) market from the 1960s onwards (Middlehurst, 2004) although many changes were as a result of the Dearing report in 1997 (Dearing, 1997) leading to considerable expansion of the numbers of UK higher education institutions and ultimately resulting in the management of universities as global businesses (Deem, 1998). Subsequent changes to the funding systems such as the introduction of a blanket £9K fee for home students and reductions in direct government financing has led to shortfalls between costs and income. This combined with the business model has led to many universities increasing student numbers but not staff at a comparative rate. More staff are employed on fixed term, temporary and even zero-hours contracts leading to mass casualization across the sector. These staff were the first casualties of COVID-19 as many universities abruptly terminated their employment as soon as the effects of the pandemic were felt in the UK (Denney, 2020a,b). At the same time as changes in funding, the UK government established a sector regulator, the Office for Students, which has in turn substantially increased the role of scrutiny and external assessment. Together these factors have created a pressure-pot for staff within the system and academics are increasingly experiencing work-related stress (Erickson et al., 2020) whilst there is, at the same time, no evidence that the students' educational experiences have been improved. A key issue at the time of COVID-19, therefore, was *at what cost are we prepared to continue to cause suffering in our higher education universities and system?* If the answer is to continue with the suffering within the system, the next question is then *what can compassion teach us in order to help redress the balance and reduce suffering?*

2.2. Compassion

Compassion in the field of organization studies is relatively recent although burgeoning, since Frost (1999) highlighted the extent of suffering at work and the importance of developing compassionate responses. Compassion, although often misunderstood colloquially as an emotion, has been defined as an action to ameliorate suffering (Worline and Dutton, 2017), and a four stage process has been identified by both Worline and Dutton (2017) and Simpson et al. (2019), consisting of the following:

1. *Noticing* that suffering is present;
2. Making *meaning* of the suffering in order to create the desire to alleviate it;
3. *Feeling* empathic concern for those who are experiencing the suffering;
4. *Taking action* to alleviate the suffering to some extent at least.

Compassion in the workplace is associated with better well-being and health of employees and a positive relationship between colleagues, as well as better bottom-line results. Compassion has also been linked with other factors such as improved employee engagement and hence performance and positive recruitment and retention (Lilius et al., 2003; Poorkavoos, 2016; Guinot et al., 2020; Ramachandran et al., 2023).

2.3. Suffering

The compassion literature identifies two types of suffering—inevitable and avoidable. Inevitable suffering is that which comes as part of the human existence through things like bereavement and illness. Inevitable suffering happens to most people at some point in their lives and there is a role for understanding that suffering transcends any such work-life balance as might purport to exist (Frost, 1999; Kanov, 2021). COVID itself taught us this when people were working from home and juggling multiple demands just to keep a sense of normality going, to deliver on work-requirements and look after elderly family members and provide a semblance of home-schooling. Most people during COVID were suffering, even if they were not ill with the virus themselves and this has gone largely unacknowledged in the higher education sectors.

Avoidable suffering, however, is that caused within our organizations, or at least, exacerbated by them. Frost (2007) and Kanov (2021) refer to this kind of suffering as being *preventable*, in that if our organizations themselves were better designed and work structures and leaders paid more attention to how people are affected within the workplace, then much suffering caused by systems, processes and working conditions could be eliminated, or substantially reduced (Frost, 2007; Kanov, 2021). Workplaces, however, rarely invest time in listening to the stories of those within the organization to hear the honest experiences of life and work, as recommended by Worline and Dutton (2017), with a view to understanding how things can be improved (Worline and Dutton, 2017). One of the purposes of the study reported here, therefore, was to give participants the opportunity to reflect on their working experiences during the COVID-19 pandemic and to illuminate the

aspects that caused suffering and where compassion was able to alleviate the suffering.

2.4. Compassion and crisis

Whilst suffering is part of the landscape of working in organizations, additional suffering can be caused by crisis events such as natural disasters and accidents, and organizational responses to these provide fertile ground for compassion researchers. Dutton et al. (2006) and Simpson et al. (2015) both conducted research into unforeseen crises and the responses that were experienced within organizations—one, in the Dutton et al. (2006) study, a top-tier university. The wide-ranging impacts of the recent COVID-19 global pandemic have refocused attention on the role of compassion within organizations, and on compassionate leadership, conceptualized as a style by Ramachandran et al. (2023). Leadership itself has been widely studied and is broadly conceptualized as a process, a trait, or a behavior. Contingency theory, however, probably holds the most intuitively appealing explanation that leadership effectiveness depends on the leader, their followers and the context or situation that they are operating in at any given point in time (Manning and Curtis, 2012). Leadership effectiveness, of course, is itself open to interpretation dependent on the audience asked for their point of view. If the contingency theory is taken, however, then crises are of particular interest in revealing leadership behaviors and the extent of compassion employed. COVID-19 furthermore is an even more interesting example as the crisis was far from a one-off event and was extended over a long period of time. Although Simpson et al.'s (2015) work looked at the impact of a crisis over a longer period than Dutton et al. (2006), the extent of the crisis did not last as long as COVID-19. COVID-19 therefore gives us a particularly interesting insight into what happens to compassion within organizations over a long-drawn-out crisis.

2.5. COVID-19 and the higher education sector

In December 2019, the World Health Organization was notified of a novel coronavirus in China, although it is thought that what became known as SARS-CoV-2 had been circulating since November 2019. By the middle of January 2020, other countries across the world were identifying and reporting cases. By the end of January 2020, some 10000 cases were reported across 21 countries, indicating the impact of global mobility and the connectedness between different cultures (Holshue et al., 2020).

The ensuing impact on higher education was enormous. In March 2020, universities across the world rushed to put their teaching and assessments online, staff were sent home to work and many students found themselves trapped in halls of residence with limited access to food. Given the extent of campus-based activities, and therefore revenue, universities were significantly impacted financially by the ensuing lockdowns. In the UK, there were calls for students to receive tuition fee-rebates although none materialized and the UK government supported universities

in continuing to charge full fees throughout the pandemic period, albeit with the caveat that quality had to be maintained (Department for Education University students and COVID-19 FAQ, 2020). There was also recognition at that time that universities were using the impact of the pandemic to invest in innovative online teaching practices—something that had long been under development in most institutions but had not previously received much impetus. Universities, as large and global organizations, can take a long time to introduce innovations and there is a tendency to revert to the “tried and tested” methods of in-person teaching with ensuing resistance to engaging proactively with online formats. Put in a situation where there was no other choice, universities stepped up where they could but there was also a prevailing view that there would be a return to “normal,” interpreted as “pre-pandemic,” and any online provision was therefore temporary.

The impact of the pandemic period on teaching has been well documented (c.f. Karalis and Raikou, 2020; Leask, 2020; Pokhrel and Chhetri, 2021; Ammigan et al., 2022; Devlin and Samarawickrema, 2022; Tomej et al., 2022) but there has been less about the experiences of staff who worked through this period. Universities are large and highly complex institutions and they do more than teach students; staff are employed in a myriad of different roles and the interpretation of the impact of the pandemic on staff therefore deserves to be more nuanced. The overall aim of the project reported herewith, therefore, is to record as many experiences as possible of what working in UK higher education has been like throughout this period—to hear the different interpretations that individuals put on their roles within the academy and to understand the impact of COVID on the weaving together of personal and professional lives. During lockdowns and school-closures, people found that their professional and personal lives could no longer be as clearly separated as they had been pre-COVID. Corbera et al. (2020) comment that the confinement was not of our own making but identify that we have all had a choice in how to respond to it and it is therefore important to understand how different people make sense of the situation and dealt with the stresses that it induced. This was also a time of profound complexity for university leadership. During the period there was a very prominent focus on “students first” but it is also necessary to understand the extent to which this was at the expense of staff health and wellbeing. Paradoxically, the pandemic also presented an opportunity for people to share that they were suffering and opened up opportunities for compassionate responses. Compassion has therefore been used as a lens to interpret the responses in this study and to identify how compassion has manifested during the pandemic period from the staff perspective. In so doing, this paper makes two distinct contributions. Firstly, it identifies the experiences of staff working in UK universities during the COVID-19 pandemic period and interprets these experiences using a compassion lens. As such, it identifies how compassion ebbed and flowed during the pandemic period. Secondly, the role of university leadership is examined with the compassion lens and this study therefore provides crucial information for university leaders for the future on how they can deal with both avoidable and inevitable suffering.

3. Methods

3.1. Overall approach and sampling

The study reported here intended to identify and explain staff experiences of working in UK universities between March 2020 and December 2021. Participants for the research were invited via social media (Twitter, LinkedIn and a higher education Facebook group that the researcher is a member of) and a higher education mailing list. Following this, snowball sampling was then used and contacts of the researcher were also asked to pass on the invitation email to colleagues and during the interviews, participants were asked to cascade details of the research and invitations to take part to colleagues. 29 interviews were carried out across 11 different universities where individuals were asked to talk through the story of their pandemic experiences along the timeline of March 2020 to the date of the interview. Similar approaches in organizational compassion studies have been used by Dutton et al. (2006) in their examination of compassion organizing in the face of a fire and by Simpson et al. (2015) in their analysis of the compassion response by businesses in the Brisbane floods of 2011. Both studies scrutinized the individual interpretations of compassionate responses using interviews, and Dutton et al. (2006) also obtained further documentation. Storytelling is also a well established method of research in organization studies (Van Hulst and Ybema, 2020). This study therefore takes a similar approach to Dutton et al. (2006) with interviews and additional documents. The aim was to interview 30 participants in total and 35 contacts in total were made. In the end, 29 interviews were conducted before I had to cease interviewing due to a family crisis which interrupted work at that stage. Each interview lasted for an average of one hour, was audio recorded and subsequently transcribed.

The transcripts were analyzed using thematic analysis where key themes and sub-themes were identified in NVivo. The themes were then scrutinized for evidence of suffering and compassion, identifying descriptions of suffering, the varying stages of compassion and the context within which they occurred and the players in the interaction.

As participants were therefore self-selecting, interviewees were asked why they had chosen to take part to identify any bias. Most responded that they were aware from their own research how difficult it can be to get people to be interviewed and so they were taking part out of a sense of duty and solidarity to a fellow social science researcher. Only two people commented that they thought that they had a particular story to tell with regards to the pandemic, due to disability and specific circumstances.

As the purpose of the research was to capture the diversity of participant's experiences across the breadth of working within UK higher education, only broad criteria for participation were established, these being that individuals had to be from the following groups:

- Professional/administrative services
- Academic (faculty)—either teaching-only or teaching-and-research
- Research-only
- OR be a doctoral research student

TABLE 1 Breakdown of participants by gender and broad job type.

Gender-male/female ($n = 29$)	13/16
Academic	14
Professional services	6
Academic-third space/professional services	3
Research (not clinical)	3
Clinical research	2
Doctoral student	1
All job types	$n = 29$

- AND not restricted by whether they were full-time or part-time.

Out of the 29 participants, the majority were split between professional services roles and faculty/academic staff. Only 3 people were research-only and only 1 person was a doctoral student. It was also observed that relatively few participants were in senior leadership roles with only 2 people holding senior academic department or faculty leadership roles. Table 1 gives details of the breakdown of participants by gender and broad job role.

Broad job types distinguish between academic, clinical researchers, researchers in non-clinical disciplines, professional services staff and those in “academic/third space” roles. Third Space are increasingly being recognized in the literature and include staff who usually have academic backgrounds (often a doctorate) and do jobs which require this expertise but may not necessarily hold academic contracts. There is uncertainty in the sector over whether these roles should be assigned academic or professional services contracts, often related to whether the employing university is research intensive or post-1992. The literature on the increase in Third Space roles is increasing and seeks to reflect the complexity of the modern university (Whitchurch, 2006, 2008, 2012; Denney, 2020b, 2021b; McIntosh and Nutt, 2022). Furthermore, there was evidence from the interviews for this study that the importance of these roles increased substantially during the pandemic period—particularly for those in academic/educational development and digital education when the pivot to online teaching took place.

3.2. Procedure

Two pilot interviews helped to establish the protocol whereby participants were asked to tell their “story” of the pandemic period from March 2020, when most UK universities went into lockdown and there was an emergency “pivot” to online teaching and assessment, through to the date of the interview. The interviews were all carried out in November and December of 2021, where the UK was still in and out of lockdowns and pandemic restrictions and universities were emphasizing different balances of in-person and online teaching. Participants were asked to comment on how they interpreted university-level communications and to talk about anything that they saw as being of particular significance throughout the pandemic related to work. As such, this was a broad

mandate and gave participants significant flexibility in how they identified and interpreted what they wanted to talk about. They were also asked if they had any additional materials that they would like to provide to illustrate aspects of working in the pandemic period and many did—varying from personal photographs through to podcasts and teaching materials.

The interviews were therefore loosely structured as the aim was to draw out everyone’s COVID story. Interviewees were guaranteed anonymity, including assurance that their institution would not be identifiable from any quotes used. There were initial concerns that participants may be unwilling to talk about problems in their institution during the COVID period, so this was identified in the ethical approval stage, and additional statements of reassurance regarding anonymity were included in the Consent Form and Participant Information Sheet, as well as at the beginning of the interviews. A question list of probes was established to draw out factors relating to experiences of balancing work and home life, mental and physical health issues and views on university communications and leadership and management during the period. These questions are included in Appendix 1.

The interviews spanned 3 academic years—2019–2020, where the first lockdowns were introduced in March 2020; 2020–2021 where a significant proportion of the participants were still teaching online and the start of 2021–2022 from September to December. Nearly all the interviewees struggled to distinguish between the start and end of each academic year and most lost their place in the timeline at some point, which reinforces the impact of the pandemic in blurring the boundaries between the different academic years.

3.3. Analysis

The process of analyzing the transcripts followed an inductive approach, looking for broader themes and underlying patterns in the experiences of higher education staff during the COVID-19 pandemic. The process involved identifying themes in the raw data using a first-cycle coding approach, followed by subsequent re-organization of those codes into second order categories. The coding framework used an initial round of descriptive terms and subsequently interpretative codes and finally pattern codes (Miles et al., 2020). The coding process was iterative and further analysis of the data followed which led to the identification of the compassion phases discussed here.

3.4. Methodological limitations

Management research involves addressing complex phenomena and qualitative approaches to investigating these phenomena emphasize the uniqueness of the information obtained to build theory. In this study, the contribution lies in both the individuality of the experiences of those interviewed as well as the similarities which have led to the development of the themes discussed below. One of the strengths of the study is that the five phases identified in the results were discernible across multiple participants. However, these are the reports of only 29 people

employed in universities throughout the pandemic period and are not necessarily representative of the wider population of staff. Additionally, accuracy of reflections vary over time and one shortcoming of this study is that it relies on the memories of the participants. Participants were asked to provide additional documentation to support their stories but not all did. The types of documentations varied from photographs to evidence of work carried out but interestingly no journal entries were provided which would have strengthened the study by allowing for an additional layer of data scrutiny.

3.5. Reflection

Although only 29 people were interviewed for this study, my own experiences as an academic working in a UK university throughout the COVID-19 pandemic period have no doubt played a part on my interactions with the data and in the interviews. In qualitative research, it is impossible to divorce the researcher from the research and although a systematic approach has been applied to analyzing the data, it is impossible to remove oneself completely the process. Easterby-Smith et al. (2021) refer to different perspectives on reflexivity and how the researcher seeks to be aware of their presence within the research process. Being an academic myself during COVID-19 played a strong part in my desire to conduct this research and to provide an opportunity for others to tell their stories. The interviews resulted in some intense and personal conversations, and occasionally participants would get upset reflecting back on their experiences. I was not outside of this and I shared the pain that they were talking about. When designing the research, I had perhaps not taken this into account as well as I might, and I soon realized that I needed to space the interviews out in order to give myself a break from the intensity of being back in the stress of the pandemic period. The suffering was shared throughout the interview process and it is therefore not possible to be a dispassionate observer for this piece of research. Instead, throughout the interview period, as indeed I did throughout the pandemic period, I captured my own feelings and observations in a journal. The results and discussion below therefore include my own views and also relate the findings to the wider environment within which the experiences were taking place.

4. Results and discussion

Analysis of the transcripts led to the identification of five discernible phases of suffering and compassion throughout the pandemic period. Whilst the timeframes of these phases are not exactly the same for all participants, they were broadly similar enough to enable them to be grouped. The phases are identified as follows:

Phase 1— March to September 2020 *Novelty Phase*

Phase 2— September to December 2020 *Compassion Focus on Students*

Phase 3— December 2020 to March 2021 *On our Knees*

Phase 4— April to September 2021 *No End in Sight*

Phase 5— September to December 2021 *Compassion Fatigue*

The following sections talk through each of the phases in turn and identifies the suffering that characterizes the phase, along with the level of compassion.

4.1. Phase 1—March to September 2020 novelty phase

Participants in this research project identified the first phase, between March and September 2020, as being a novelty phase:

I think working from home, in March... it was... there's that perception of it being fun at first, it goes through a real rollercoaster and you're thinking, "This is only going to last two weeks, we'll be back in the office maybe in a few weeks' time." AW1

This was characterized as being both positive and negative in that there was a huge amount of shock and fear present:

one of our trainees was infected with COVID-19 and passed it on to two thirds of the group, including me. BL1

We just kind of plodded on in a very stressed out way with the students all a bit scared, us all a bit scared, apologizing to them then saying, "You're doing your best," and luckily I think the semester lasted about 4 more weeks and then it was the Easter break. EH1

But it also presented a good opportunity for those who had an interest in online and digital education to try out a few things that they had wanted to experiment with:

We wanted to maintain a practical element as well, what practicals we can do at home... I was doing... science practicals with my son... I was using his Playmobil cars, and we were making ramps. I was drawing on the ramps, distance. My son just thought it was fun, attaching some masses to the end and watching it drop and see it zoom. But I was using those photos to make a video to say, "This is how they can measure how mass affects speed"... We did digestion. So, making poo through tights and stuff. BL1

Or indeed felt that the initial lockdown presented the challenge of how to engage with students and responded to that creatively:

I think it was about going out there and finding those tools and trying to make the learning different. Not trying to make it the same because it wasn't. Trying to make it different, trying to make it engaging. The other silly thing that we did, we'd start the morning session 15 minutes early, or whatever session, and we'd have music going. The students would tell us what music they wanted. So, I've got my Alexa here... I'd say to the students, "Oh, just ask it to play something." That would start a dialogue about when they remembered that song, what they liked about that song... It was really from the beginning but then, it was picking up these tools. "How do we keep our relationship with our students going?" Because it's a really hard one and I'm a firm believer. If you don't develop that relationship with the student, then learning doesn't happen. SS1

In the UK, universities went into lockdown and remote teaching toward the end of March when the Easter break was looming, and at a time when the majority of undergraduate teaching was coming to an end for the academic year. There were concerns about how to pivot to online assessment but the pressures were not felt to be immense at this stage, although many of the participants characterized this phase as being a “rollercoaster” of emotions. The suffering was more focused collectively and externally—this was something that everyone was experiencing together and compassion levels were very high at the time:

We were very forgiving and our students were very forgiving because it was all new and it was all unknown. EHI

There was also no understanding of how long the pandemic and lockdowns would last and although there was daily doom and gloom in the media, there was also quite a lot of lighthearted focus on how everyone was adapting—zoom yoga, Joe Wicks’ online PE classes and pets interrupting working from home meetings. The fear was interspersed with a sense that we were all in this together and also that we had emotional resources that we could tap into in order to find compassion for others, as well as being on the receiving end ourselves. The weather in the UK was also beautiful in the summer of 2020 and many interviewees referred to the fact that everyone had to take holidays in the UK as not being problematic that year. As a result, there was a sense of vitality for the first period which doubtless helped the compassion. At this particular point, it is possible to view working from home as being a positive enabler for compassion. Many of the participants reported enjoying spending additional time with family and engaging in pursuits such as baking and board games that they had not previously had time for.

The first bit I had my whole family home which was lovely; having 3 grown-up children move back in with you is fantastic and the weather was lovely. CG1

In some ways, there’s been some good things. When lockdown first happened, my two daughters were away at university, and they came home. They were both here, literally in the room there, cooking constantly. Baking cakes and all that sort of stuff, which is part of the problem. There’s more of me now, than there was before lockdown. Much too much more. In some ways, it was nice. My wife was home. She’s a teacher. She was teaching from here. So, I would be in this room, my daughters would be in the dining room doing their university work and my wife was upstairs... When it all first kicked off, I was being quite good and going lots of walks... We’ve got woodland nearby and there was no air traffic or road traffic. So, all you could hear was the birdsong and that was actually really good for my head. PC1

And ironically I felt good because I was at home here with my family. I mean, again, not everyone, this wouldn’t be everyone’s experience, but I’ve got three kids, the oldest is 23, I’ve got a 21 and just about to be 18. So, the middle one was due to go to university and didn’t. The youngest one was still at school so was home. And the oldest one got furloughed and came home. For the first time for years, we were together as a family, and we had lunch together every day, and I live in a beautiful part of the world. I’m looking out over trees and if I open the window

I can hear the see actually, you know, and what’s not to like, you know... I don’t want to get starry now, but it was a glorious time actually, which actually funnily enough, my eldest one is still living at home, the other two have gone off to do things, but the oldest one was talking, and she said, “Do you remember lockdown Dad? We used to come and have lunch together every day and it was lovely, we talked about things.” NP1

This phenomenon has also been reported elsewhere ([The perfectionism trap, 2021](#)). It is therefore hypothesized that the Resource Investment principle of Conservation of Resources theory may play a role in the experiences in this phase. Stress and loss of normal life were being experienced and people were taking the opportunity to invest in resources around them (family, exercise etc.) in order to mitigate against the sense of stress caused by COVID and loss of normal life. The slowing down of life and the ability to do this in the initial phases opened people up to being more compassionate with each other.

4.2. Phase 2—September to December 2020 compassion focus on students

The second phase coincided with the start of the new academic year in the UK. At this particular point, there was again more novelty with the focus being toward creating online teaching that was meaningful and effective for students. As a result, the focus during this time was very much on students themselves and universities were identifying ways in which they could build in compassion into their policies for students. For example, most universities produced *no detriment policies* which enabled students to make multiple claims for the impact of COVID on their assessments. Whilst this was a way in which suffering of students was recognized and alleviated, it had a negative impact on staff, who had to deal with an almost continuous marking load and felt significantly let down by management.

... the university decided to implement some policies around submissions, where the students had the original [deadline] and then they had an extension, and then they had another extension [which]...kicked on any resubmissions. So we were finding ourselves with multiple submission points...when dissertations were due in April, some of them didn’t come through until July. In fact, one didn’t arrive until the end of August... I felt we were overlooked because these multiple submission points caused huge stress to staff. It meant that holiday times were interrupted. It meant for me...managing a module where there was multiple submission points, that you could never put it down... I don’t feel that was well thought out, in relation to staff’s wellbeing. SS1

The compassion element at this phase is very interesting because it was institutionalized and formalized but prioritized one community group (the students) over another (the staff). In Phase 1, compassion had been managed locally and informally but the attempt to build it into institutional structures neglected to consider any unintended consequences on staff.

I think... there was perhaps a greater sense of accountability around the student experience and around student satisfaction... To me, it felt like power and control... I think maybe part of it was we need to know what's happening because we want to make sure that we can tell other people. We need to tell governors, we need to tell society, we need to tell our region what we're doing so that everybody knows that we're doing the right thing for our students. FS1

In terms of the 4-stage model of compassion, it seems as though UK universities had *noticed* the suffering of one group, students, and had moved through the model to *respond* by building in multiple submission points to allow for the impact of COVID on students' abilities to be assessed fairly. This is, of course, laudable and an appropriate response in the circumstances. It did, however, completely ignore the reality that staff were also suffering greatly at the time. Not only were staff suffering with higher workloads, but the impact of lockdowns meant that many were trying to juggle childcare and home-schooling with a constant demand for more and more continuous work from their employer. No wonder they felt ignored.

At the same time, some universities were attempting to get students back onto campus by introducing a more hybrid model of teaching. Again, the focus was on what would be most beneficial for students but staff found that attendance was very patchy. Given the effort put in by staff, and the fear experienced by many in returning to campus, this again was an area where *response* to student compassion outweighed considerations for staff.

I think the students were still pretty tolerant. We did put on some in-person events... Even when we were doing all the lectures in online environments, we did have some live classes. Students said they were going to turn up and then, very few did, actually... It was a bit disappointing, but you can't really blame the students. PC1

Although many of the decisions about how to teach were left up to individual departments which did allow them to take into consideration the needs of individual staff, some universities did try to implement a return full-scale to face-to-face teaching. This was a decision taken by senior leadership which brought them into conflict with the localized consideration of staff needs – an apparent clash between institutionalized compassion for students and localized, informal compassion for staff.

In September 2020 the university decided it would return, face-to-face and at that point, I just went, 'No'... But my line manager... was absolutely superb and we agreed that everything I would do would be online. There would be no face-to-face... I chose to keep completely away because they were in contact with students and I didn't want to put myself in any risk... By Christmas, the university had decided they were going to have to go back because Christmas [2020] was disastrous... SS1

Phase 2 is therefore characterized by a mix between institutional policies aimed at formalizing compassion for students such as the *no detriment* policy and not only a lack of for staff, but

an exacerbation of staff suffering due to it. In some cases, this was mitigated by local line management compassion, as in the example given by SS1 above. For other people this was more problematic where local line management was intent on implementing institutional policy. The interviews demonstrated that there was definite patchiness across the sector in terms of how institutions approached this issue – some participants reported feeling well supported by their institution to carry on working remotely, whereas others expressed quite strong emotions about how management treated staff at this time.

...colleagues and my team and the people I work with were fantastic and so supportive but we had to build our own... support groups... institutionally we got four days extra leave throughout the year... but no change to workload allocation... it's quite eye-opening how a senior executive made decisions on like gut and whim and brain farts without any evidence or any proper consultation has been quite shocking to be honest. SZ1

This period tells us a lot about apparent clashes of compassion in our organizations and something that needs to be learnt is that attempts to introduce compassionate policies for one group in our organizational community can have a knock-on detrimental effect on others.

4.3. Phase 3—December 2020 to March 2021 on our knees

Phase 3 was identified as being a time of contradictions. The Christmas period in the UK that year had been quite brutal in terms of lockdowns and COVID restrictions, so staff did not feel that they got much of a break. As a result, they did not return to university in the January feeling at all refreshed. At the same time, however, they were now familiar with the practices of teaching and working online and this specifically was no longer causing large amounts of anxiety and stress. These working and teaching practices were no longer a novelty however, so any energy from that sense of newness was now lost. It was also during this period, that there were a number of communications from the Minister of State for Universities, Michelle Donelan, that were causing senior management to behave more aggressively toward staff. On 30th December 2020, right in the middle of the university Christmas break when most institutions were closed and staff were on leave, she issued a letter to all students advising them that from the end of January 2021, there would be a phased return to in-person teaching on university campuses. This was accompanied by a letter to University Vice-Chancellors and in some areas, was taken as an opportunity to start to force a return to campus without due consideration of what staff were experiencing at the time.

I think there were a lot of staff who were very worried about face-to-face... A lot of academics are over 50... Some, a little larger than we should be, especially after lockdown and then there's all the other health conditions and maybe have got children and complex lives as well. I think a lot of people were reluctant to do face-to-face, which I understand. PC1

Christmastime last year[2020], one colleague called me, like, she texted me on Friday night, 11:00 p.m. saying, “Can we talk at some point?” and I was like, “Okay, what’s going on, is everything okay?” and so I called her back and she didn’t pick up the phone and she [said]everything is okay, I will give you a call on [another day]. Okay, and then I was worried a little bit and I was concerned about this and I called her back on Saturday morning, so the day after and after a couple of minutes of hello, how are you and that, then and she broke into tears and like she would, it was... a lot like crying for like sad, a sadness or, it was like hysteric... I mean, she told me that she would be most clear that she reached a point where, you know... RN1

University senior leadership in many institutions had tried to support staff by closing for 2 weeks over the Christmas period of 2020/21 with the view that this would give staff a much-needed break, even if they could not travel. As illustrated by the quote above from RN1, staff were not just exhausted – in some cases they were near breaking point. The timing of the mandate from Michele Donelan regarding a return to campus could not have been worse, and could actually be regarded as being punitive to staff who had also suffered enormously during the lockdowns.

This phase is characterized by a clash between government policies which were putting senior leadership in universities in a difficult position, the fear of some staff regarding a return to face-to-face teaching and the fatigue experienced by everyone.

I think, by then, the students were more fatigued by the whole situation. I think a lot of them thought, ‘Well, you should have fixed it by now.’ I can absolutely get that. It’s not their fault. They are the victims in this... They’re worried, they’re uncertain, their futures... Will they get a degree that’s worthwhile?...All this sort of stuff... But yes, I think the students were still pretty tolerant. PCI

Some returns to campus did therefore take place in the January of 2021.

4.4. Phase 4—April to September 2021 *no end in sight*

Phase 4 was characterized by even more exhaustion. At this point, the academic year should have been coming to an end and staff should have been able to take much needed holidays. Unfortunately, the compassion policies implemented for students were having a further knock-on effect on staff at this point in the academic year because again so many students were able to undertake resubmissions and submit work at multiple submission points. For the second academic year running, the 2020–21 academic year ran straight over into the 2021–22 year without any break at all. Whilst staff were appreciative of the concerns for students, it was, without doubt, at the expense of staff health and wellbeing. Furthermore, whilst some international travel had opened up again and restrictions were gradually being lifted, the weather in the UK was not as nice as it had been in 2020. Any holidays that staff were able to take were therefore not as pleasant as they had been the previous year.

I think that year, 2021, for staff, was a tough year... I think there’s been a larger number of people with mental health problems. Problems with isolation, anxiety because those members of staff who were having to be the responsible person for all the students, have got all the stress that everybody else was experiencing as well. PCI

The summer was also marred by poor results in the annual National Student Survey—a measure of student satisfaction that is used heavily in league tables and to provide national information about the quality of higher education in the UK. The COVID experience meant that students were using the survey to express their frustration about lockdowns and institutional policies for the most part, but academic staff experienced it as something quite personal.

My initial feeling was “That is a massive kick in the teeth from the students that we’ve worked so hard to support”. PCI

4.5. Phase 5—September to December 2021 *compassion fatigue*

Probably unsurprisingly the final phase identified in this study is characterized by exhaustion and fatigue, affecting the interactions between staff and management and resulting in the perception that management no longer had any compassion for staff at all. The first term of the 2021–22 academic year was an experiment in hybrid teaching for many, which combined both in-person and online teaching simultaneously. Universally this was loathed as staff found it impossible to interact with students present in-class in front of them at the same time as responding to chat messages and online interactions on the screen:

I think the danger is by trying to help everybody you can make it a worst experience for everybody. That’s my fear, yes. And I also don’t think having been very supportive with the university and its management of this, I think there are some issues now which the managerial team who haven’t experienced much work on the ground with this are not understanding. So, the idea of hybrid is so tempting financially, student numbers, you know, I don’t need to say all those things to you, you can see why it’s so tempting, but if you haven’t actually tried it, you don’t really realize how difficult it is. So, I think there is a misunderstanding around that. NPI

There were some quite aggressive moves by management to get staff back onto campus in person, with no apparent acknowledgment of what staff had gone through in the preceding eighteen months or any concern about whether they had anxiety and fears about returning to in person interactions, or any consideration of underlying health conditions.

Going back into the unit for me, was a mammoth step... I had to manage that in a very careful way, by going in and walking around. Going to my office, meeting a colleague for a cup of coffee. Just generally, getting used to being on campus again. I felt

very vulnerable, extremely vulnerable because the government had taken off, no masks, no social distancing. So, students are walking around without any masks on... And I'm the person that still hasn't been into [supermarket]. I'm still doing online shopping... I can only liken it to when you've been off work for an illness and then you go back. Everything's faster, everything is in your face, everything's noisier and trying to find your way around systems. SS1

Some of the messaging from management was seen as being inflammatory and tone-deaf to staff experiences.

...you've put your finger on the bone of contention there... the university message is we are teaching face-to-face. NP1

Teaching staff also referred to frustrations when they were being asked to undertake occupational health assessments concerning any underlying conditions which made a return to face-to-face teaching risky which were then subsequently ignored by managers. At the same time, some institutions imposed significant health and safety requirements to enable the teaching to take place but this put an additional burden on academic staff.

So students in order to come onto campus had to prove to us [academics] they had done two lateral flow tests a week... the university [said] "we lecturers need to see them as they walk into the classroom"... I did not get a job as an academic to be a police person...

The other thing we were told to do... was take temperatures of students before they walked into the room. LN1

Staff were also frustrated by the focus on in-person teaching. Several participants pointed out that they had been doing online teaching before COVID because it was pedagogically appropriate and felt that the blanket policies being implemented by their institutions were therefore inappropriate and a retrograde step. This was seen as a fear response to pressure from government, as opposed to an opportunity to improve further blended and online offerings to students.

Most institutions implemented some form of hybrid teaching in order to accommodate the varying needs of students such as those with underlying health conditions or caring for vulnerable relatives, as well as to allow for international students who were not allowed to travel to the UK by their own country at that time. Unfortunately hybrid was universally hated by everyone in the sample. In addition, participants referred to the extent of the fatigue that staff were experiencing and the clash between staff fatigue and student expectations.

I think staff are tired. They started the year tired... I think the students have come back expecting more normality than is possible... There's a little bit of unhappiness that we're not fully back 100% face-to-face. They kind of understand it but they're unhappy about it as well. PC1

Staff were still trying to demonstrate understanding of, and empathy for, the position of students at the time, but from a position themselves where their own emotional resources were completely depleted.

Some universities in the sample appeared to be taking a more softly, softly approach where they tried to encourage staff back onto campus but were not forcing them. Collectively though, several participants referenced that they had noticed a number of colleagues handing in their notice and choosing to resign in the first waves of what has become known as *The Great Resignation*.

Speech and Language, half the staff left. Nursing, two thirds of the staff left... And the response to that [from senior management] is, well, people need to be able to choose to leave. And I call it the canary in the coalmine, they keep replacing the canaries. LN1

Ultimately, the fatigue meant that some staff just did not want to keep going on, and sadly compassion was fading fast.

What struck me whilst I was researching this study was the extent to which staff put students first. Although staff were not themselves experiencing much in the way of institutionally-led compassion, they were still concerned about the welfare and educational experiences of their students and there was a high level of continuous concern as a common thread throughout all of the interviews. There was enormous disconnect between what staff were experiencing from their universities and what they were giving out to their students. The following section reflects on the findings from the interviews in the context of compassion and what organizations should learn going forwards.

5. Conclusions and recommendations

5.1. Compassion—What the pandemic has taught us

If compassion is a reaction to suffering, then suffering must exist first in order for compassion to be needed. During the pandemic period in this study, from March 2020 to December 2021, university staff and students experienced suffering in the same ways as the rest of the world, and it is important to understand how the structures, processes, and behaviors in universities at the time made it either easier or harder to express and experience compassion. The experiences of the people interviewed for this study made it clear that UK universities structurally prioritized compassion for students over that of staff. On the one hand, this is understandable given that students are, in essence, paying consumers of higher education in most of the UK (with some exceptions in Scotland). On the other, a failure to recognize the fact that the effective delivery of higher education is dependent on the wellbeing of staff is a failure of the whole system. And certainly, a failure of organizational compassion.

Worline and Dutton (2017) note that compassion is often ignored in organizations such as non-profits due to a lack of resources, large workloads, additional pressures and demands for

changes to make the business more efficient. All of these are present in profit-making organizations as well, but the assumption that non-profits *should* be focused on humanistic concerns somehow makes the absence of compassion much starker. Public universities in the UK are non-profits but in the neoliberal environment in the public sector they tread a fine line in a quasi-market environment where there is both substantial government funding along with a fee-paying structure for students. At the same time, resources have been cut in real terms, and the pandemic provided a perfect storm for panic over the future sustainability of universities. There was immediate mass cancellation of temporary contracts and Universities UK, representing 137 institutions, requested billions of pounds of additional financial support in April 2020, to fill losses due to the pandemic (The Guardian, 2020). The perception has therefore always been that resources in universities are highly restricted and compassion becomes squeezed out as a result.

The reality in the 21-month period under investigation here is that compassion ebbed and flowed for several reasons, including the perception of resources and the focus on putting students first. The evidence is that informal compassion was quite high at the beginning of the pandemic. Staff had personal reserves of energy and emotion from not having been through such a stressful time in the run-up to COVID. Furthermore, the novelty provided some energy and enthusiasm for trialing new ways of teaching and working and there was a lot of forgiveness on all sides as everyone grappled with learning Teams and Zoom. Interestingly though, the more compassion became formalized in the next phase, the less apparent it became in interpersonal interactions. This might partly have been due to the fact that universities prioritized compassion for students, through the introduction of *no-detriment* policies, without considering the corresponding impact on staff. Furthermore, the continued management of staff compassion was left to the individual line manager, instead of being comprehensively directed at the institutional level, as was the student approach. At best, this produced an uneven experience for staff.

Whilst universities continue to prioritize compassion for students at policy level, there was also enormous compassion for students from frontline staff throughout the pandemic period. The media representations at the time, however, portrayed a very different image, citing lazy university staff sitting at home and using old recordings of lectures. From my own experiences, those of colleagues and those of interviewees for this study, it is quite clear that the reality was completely different but the media image affected the Government rhetoric, which in turn pushed university senior leadership to bring staff and students back onto campus with, in some instances, little consideration for individual concerns. Some of the academic staff interviewed for this study reported feeling treated very badly with regards to the return to campus. In spite of all of the efforts that had been put into the teaching for students during the lockdowns—the incredible creativity and commitment of staff to make the experience as best they possibly could under the circumstances and the compassion they demonstrated for their students—the NSS results for 2020–2021 were an absolute “kick in the teeth” and staff felt badly let down by both management and the students. Compassion ebbed

and flowed throughout the pandemic period, but there was no doubt that staff were on the losing side when it ebbed.

Whilst it is clear from the work of Frost (2007) and Kanov (2021) that suffering can be both inevitable (i.e., life circumstances such as ill health or bereavement) and avoidable, such as that caused by organizational practices, there is a need for all organizations not to become so focused on one stakeholder group that they cause suffering to another as a result. This is becoming too common in UK universities, and it was starkly apparent during COVID. The question remains therefore about how we can include compassion in our higher education institutions without it being at the expense of one group over another. The following section contains recommendations for universities to consider, in the face of what we have learnt from the COVID-19 pandemic period.

5.2. How universities can improve their compassion practices

UK universities have become, somewhat understandably, fixated by their students since the introduction of tuition fees and a quasi-market approach. The COVID pandemic period under investigation in this study tells a clear story of how universities put students first at the expense of staff to the extent that it became embedded in the institutional cultures and stories of this period (Denney, 2022). This teaches us something important about the compassion practices of organizations more generally—that compassion extended to one group in the community can be at the cost of additional suffering to another. The question therefore is how organizations can avoid this happening and improve their compassion practices.

Four-stage models of compassion from Worline and Dutton (2017) and Simpson et al. (2019) take us through a structured approach of: initially becoming aware of suffering; feeling empathy with those suffering; assessing the suffering and identifying what action can be taken and subsequently taking action to alleviate the suffering. This is not a process that can be rushed, and one of the lessons that we need to take away from the COVID-19 pandemic is that if the response involves organizational processes or structural changes, then this needs to be further evaluated in the light of the experiences of other community groups. It is therefore recommended that organizations carry out a *compassion impact assessment* in the same way that they would an equality impact assessment when introducing new policies. The questions they should be asking are:

- What is the problem that we are seeking to solve?
- Does the new policy constitute an appropriate response to the suffering of that particular group?
- Are there any other factors that we need to consider when evaluating the response to the suffering?
- Does the proposed response impact on the work and experiences of other groups in the organizational community?
- If yes, is the likely impact going to cause new or increased suffering to those groups?
- If yes, what can be done to alleviate or respond to that suffering?

- Does that additional suffering and the proposed responses mean that it is not worth pursuing the original policy?
- What is the risk/benefit analysis of the original policy following these further considerations?

Even in the height of an unprecedented situation such as the pandemic, universities still should have taken time to consider the impact of introducing policies which alleviate the suffering of one group at the expense of suffering of another. And if nothing else is learnt, this is very much a lesson that should be taken forwards by all organizations.

There is one further action that can be taken by organizations to improve their compassion practices and that is the opportunity for storytelling. Storytelling talks to an evolutionary part of our human experience in that it is the way in which groups of people have passed down information for thousands of years. Oral storytelling was a core part of tribal life before the written word became dominant, yet it is not something that plays much of a role at all in most organizations in spite of the fact that it remains a powerful form of transmission of information and emotions. Furthermore, shared stories build cultures, common identities and histories for organizations thus enabling people to acknowledge suffering and develop appropriate compassionate responses as a community (Czarniawska and Joerges, 1997; Simpson et al., 2020). It is surely, therefore, time for organizations to create safe spaces for their communities to share their stories, and an appropriate place to start would be the experiences of the pandemic period. This was a starting point for me for this study and I have done my best to provide opportunities for those working in UK universities throughout the pandemic to tell their stories. Inevitably this introduces an element of self-selection bias to the data, but it was interesting to observe how keen people were to tell their pandemic stories, thus adding further credence to the point that this is not something that universities, or organizations more generally, are offering their employees opportunities to do.

Suffering and compassion are shared experiences—they do not exist in isolation. If organizations are able to provide safe and contained spaces for the sharing of stories, suffering will be shared instead of hidden and compassion will be provided with a better opportunity for flourishing. And the more compassion we have in our organizations, the less toxic they will be for everyone.

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Data availability statement

The raw data supporting the conclusions of this article will be made available by authors, on specific request, without undue reservation.

Ethics statement

The studies involving human participants were reviewed and approved by College of Business, Arts and Social Sciences Research Ethics Committee, Brunel University London. The patients/participants provided their written informed consent to participate in this study.

Author contributions

The author confirms being the sole contributor of this work and has approved it for publication.

Funding

This research was funded by Brunel University London, including a grant from the Business Education Research and Guidance Hub (BERGH) in Brunel Business School.

Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Appendix 1 – Interview probes

1. What were your working practices like when covid hit the higher education sector in March 2020 and how did they change at that point? Could you describe for me a typical working day before covid and then during the pandemic period?
2. How did your working practices evolve over the 18 months between spring 2020 and autumn 2021?
 - a. Probe specifically with reference to teaching/research/admin practices
3. What would you identify as being particularly good or bad during that period—in terms of working practices? Any particularly low or high points?
 - a. Probe specifically with regards to balance of domestic responsibilities and work
4. Are there any people, events or things that you would identify as having been particularly significant during the pandemic period? How?
5. Do you have any journal entries, photographs or anything else that you would like to show me and talk me through, to illustrate what this period was like for you, work-wise?
6. Looking back over this period, what would you liked to have been different?
 - a. Probe in terms of support from colleagues, employer etc
7. Looking back over this period, what was the biggest surprise to you?
8. And what advice would you give to individual universities or the sector as a whole about working practices going forwards from covid?
9. How do you see yourself now? Has your perception of yourself with regards to work changed due to the pandemic?
10. Is there anything else that you think might be of interest for me to know?



OPEN ACCESS

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RECEIVED 01 December 2022
ACCEPTED 04 July 2023
PUBLISHED 04 August 2023

CITATION
Jayasundara JMPVK, Gilbert T, Kersten S and
Meng L (2023) Why should I switch on my
camera? Developing the cognitive skills of
compassionate communications for online
group/teamwork management.
Front. Psychol. 14:1113098.
doi: 10.3389/fpsyg.2023.1113098

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Why should I switch on my camera? Developing the cognitive skills of compassionate communications for online group/teamwork management

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Introduction: Associated with learning and social isolation from each other during the pandemic-driven transition to online platforms in Higher Education (HE), many students were, and remain, reluctant to turn on their video cameras to be present with each other during their online meetings.

Using the Compassionate Mind Foundation's definition of compassion, not as an emotion, but as a psychobiological motivation to take wise action to help when self or others struggle, this comparative study examined (a) the deployment by students during online, task-focused group/team meetings, of taught verbal and non-verbal communication strategies that were explicitly compassionate and (b) the effects of these strategies on each other's social and learning experiences in these meetings, compared to when they did not use them.

Methods: Twenty-four STEM students from a sample of five Sri Lankan universities, were mixed, then divided into six groups of four students per group. This mixed-methods study, video-recorded and analyzed each group's task-focused group meetings before, then after, an online interactive 90-min training session (the intervention) in the Cognitive Skills of Compassionate Communications (CSCC) for groups/teams.

Results: Using R, SPSS and Microsoft Excel to analyse the quantitative data, a statistically significant improvement in students' screen-gaze attentiveness was identified after the CSCC intervention. The qualitative data analysis explained this and other behavioral changes that were shown to enhance students' social and learning experiences in their online meetings.

Given the strong historical and political drivers of current divisions across Sri Lankan student communities, these findings call for more urgent research on compassion as a cognitive competence for accelerating group/team cohesion and criticality across HE, and beyond.

KEYWORDS

compassionate communication, team/group work, online, social experience, learning experience

1. Introduction

The COVID-19 pandemic has substantially affected the education sector due to the sudden unexpected pandemic-driven shift to online teaching and learning irrespective of the readiness of many teachers and learners. Hence, students' disconnection (Bauer et al., 2020; Stanford University, 2020; Schwenck and Pryor, 2021) has impeded teaching and learning effectiveness and student social connectedness with each other (Lin et al., 2021). The impact on students' confidence, the lowering of their overall cognitive performances, and associated costs to students' quality of life were highlighted as major consequences of this (Aleman and Sommer, 2020). Recent research highlights some of the causes of students' reluctance to turn on their cameras, such as shyness, privacy concerns, peer pressure to talk when the camera is on, and self-perceptions of less-than-optimal personal appearance (Zhao et al., 2020; Lin et al., 2021). In addition to these factors, students also express concerns regarding the intrusion into their home environments (Gherheş et al., 2021).

This study argues that students' expressed reluctance to turn on their cameras for the above-mentioned reasons and thus being observed by others when participating in online teaching and learning settings worsened their isolation during the pandemic (Castelli and Sarvary, 2021). Relatedly, the non-use of cameras negatively affected both teacher–student and student–student interaction because observation of students' non-verbal communications during online meetings was not always possible, which in turn likely weakened the quality of their verbal communications in relation to their social and learning aspects (Zhao et al., 2020). This is at least in part because not being able to see participants led to teachers not being able to check students' understanding by paying attention to their body language, especially in terms of student facial expressions, and Palacios et al. (2022) note students' difficulties to perform as a group when some members kept their cameras off.

Several possible solutions have been suggested to encourage students to engage in active learning in online communities (Katchen, 1992; Cacioppo and Hawley, 2009; Hawley and Cacioppo, 2010; Leung et al., 2021; Schwenck and Pryor, 2021), including encouraging the use of microphones, asking questions unrelated to the target subject to break the ice and make them feel comfortable (Palacios et al., 2022), and making it mandatory for students to switch on their cameras during online classes to motivate them to stay focused (Lin et al., 2021).

Yet, in all this, there is very little discussion of the explicit role of compassion, which is empirically defined as a cognitive, psychobiological motivation (Gilbert, 2019), and its role in enhancing self and others' learning and social connectedness in online group meetings.

Gilbert (2016, 2017) and Harvey et al. (2020) investigated the learning and social cohesion among student team members during in-person classes after receiving compassionate communications training and found that learning and social cohesion were enhanced by it. In that training, as in the present study here, students were taught practical strategies to dismantle the two behaviors that they had ranked the most problematic in teamwork meetings, which were a tendency by some team members to either (a) over

talk, or “monopolise” the group (Yalom and Leszcz, 2005) so that others had little chance to speak, or (b) say little or nothing, thus contributing very little to the group. Similarly, Jayasundara et al. (2022) demonstrated the feasibility and value of developing Cognitive Skills of Compassionate Communications (CSCC) among UK HE STEM students in their online group work management. This latter study (Jayasundara et al., 2022) identifies how students were motivated to turn on their webcams in their online group meetings after recognizing their own abilities to support one another through both their verbal and non-verbal compassionate communications during their team meetings.

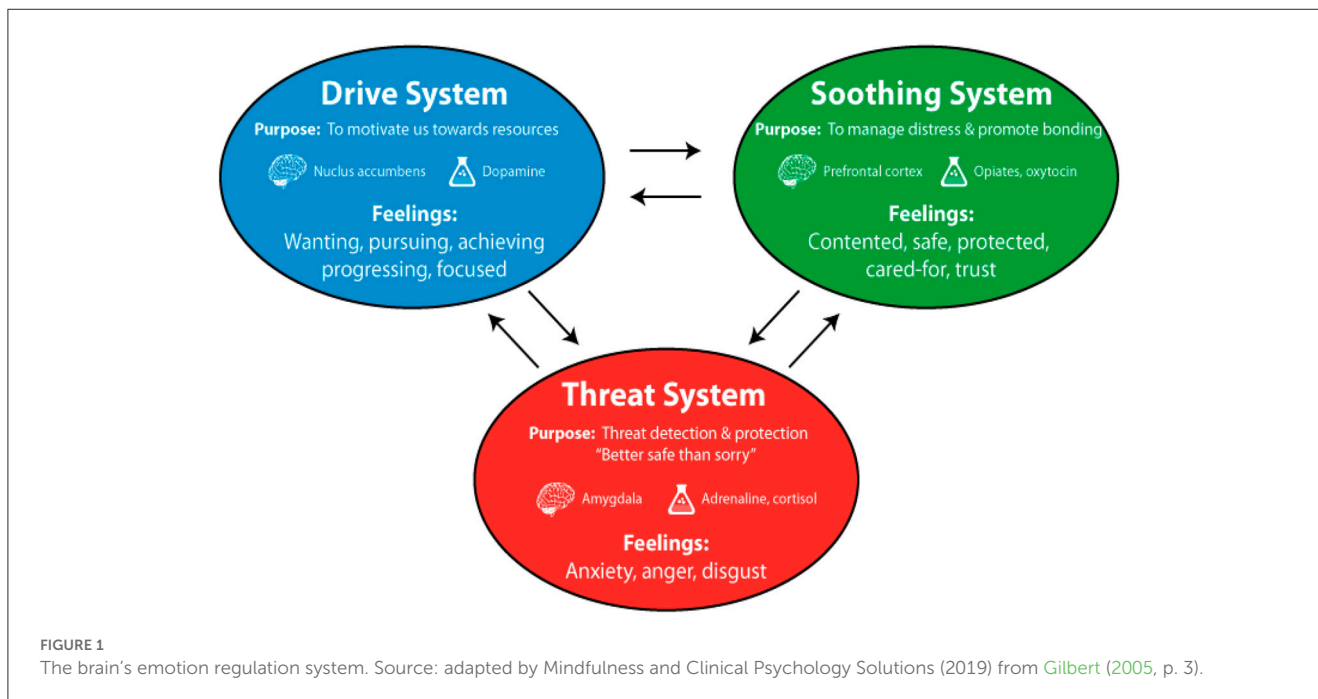
The current study was conducted to investigate whether, and, if so, how, the above understanding of compassion is relevant to Sri Lankan-based HE STEM students in Sri Lankan universities despite clear evidence of tensions between Sinhalese, Tamil, and Muslim students in the country.

Hence, the aspect of the study presented here investigates the adaptability of evidence-based CSCC strategies among Sri Lankan HE STEM students considering them as a suitably challenging choice to explore the applicability of CSCC for enhancing their group cohesion along with learning experience. This is because of the well-documented tensions among Sinhalese, Tamil, and Muslim students in Sri Lanka. British Empire imperialism and its divisive legacy culminated in the country's 26-year civil war (1983–2009; Gunasingam, 1999; Subramanian, 2015). Even after this, intersectional violence throughout the nation—including among Sri Lankan HE students—remains an issue. As recently as 2019 (AdaDerana, 2019a,b; Alwis, 2019), the Sri Lankan government was forced to close all 15 state universities due to the Easter bombings across the country by Muslim extremists. Some state universities were closed for as long as 2 months, only for some of these state universities to be closed yet again when student conflicts re-ignited after their return to campuses. This wider socio-economic political and historical context has been an obvious activator of the collective threat and drive systems, that are explained next, across whole communities in Sri Lanka.

1.1. The theoretical model

The psychobiological model of compassion (Compassionate Mind Foundation) was used as the theoretical model to map the wider socio, economic, political, and historical context in Sri Lanka to the current study. As the Compassionate Mind Foundation explains, humans switch between three mood-regulating systems: threat, drive, and soothing (Figure 1).

Each of these three systems is associated with different brain regions and different brain chemistry. Systemic imbalance among the three leads to distress, which is frequently correlated with the underdevelopment of the soothing system (Compassionate Mind Foundation; Mindfulness Clinical Psychology Solutions, 2019). Our brains are hard-wired to be alert to threats (fight, flight, and freeze). This threat system has enabled countless species to survive. The trouble is that in modern humans, this system can disable the brain's capacity to engage in higher-order thinking such as decision-making and problem-solving (Cozolino, 2013). The



second mood-regulatory system—the drive system—enables us to strive to achieve what we want or need (or what we believe we need). But overstimulation of the threat and drive systems, e.g., in group monopoliser, leads to an imbalance between the three mood regulatory systems; the soothing system is underdeveloped. This may cause distress or psychological difficulties to both groups and individuals. The soothing system, the third mood-regulatory system in the brain, is activated by giving or receiving care from self or others and allows us to think more calmly, more rationally, and focus. The soothing system of the brain can be trained to facilitate a balance among these three systems (Gilbert et al., 2009).

The balance among these three systems becomes damaged in people who tend to oscillate primarily between the first two systems, that is, between aversion (the threat system which operates through fight, flight, or freeze responses to perceived social or other threats) and striving (the drive system which is seen in the brains' efforts to address the threat; Gilbert et al., 2009). This type of brain activity can draw people into loops of brooding, rumination, and (particularly anticipatory) worry, and therefore a striving to address the perceived threat(s). The purpose of such striving is to avoid inferiority (Gilbert et al., 2009), which has been studied by the Compassionate Mind Foundation among UK university students.

Similarly, provided that they can be motivated to practice social connectivity through developing compassionate communication abilities in the context of online group meetings, which in turn facilitates stimulating their soothing systems, Sri Lankan students were a viable sample for an intervention based on compassionate communications for online group work management.

2. Materials and methods

In this action research study, STEM students studying at five Sri Lankan state universities participated in the study online. The study

comprised six student groups, each one consisting of four students who were pursuing their STEM-related degree programmes. Each group comprised a combination of Sinhalese, Tamil, and Muslim students and representation of both genders and up to four Sri Lankan universities. The latter was to ensure the participating students were likely strangers to each other. The focus on STEM students was in keeping with the World Bank's funding of Sri Lanka in the education of, specifically, its STEM students in emotionally intelligent communication skills (AHEAD, 2018).

2.1. The aim of the current study

The primary research question is as follows: Can Sri Lankan-based STEM students be motivated to switch their cameras on during their online group work meetings by learning about the cognitive skills of compassionate communication? The sub-research questions were as follows:

- Is there a significant difference in the screen gaze behaviors of the respondents before and after the CSCC intervention? Based on this, the following hypotheses were developed:
 - H₀: There is no difference in students' screen gaze behaviors that could be attributed to the CSCC intervention.
 - H₁: There is a difference in students' screen gaze behaviors that could be attributed to the CSCC intervention.
- Are there any observable changes in respondents' behaviors during their group work meetings before and after the CSCC training intervention?
- How do respondents perceive the application of common shared virtual background in their online group work meetings?

In particular, the first sub-research question is answered through quantitative data analysis, the second sub-question is addressed through both quantitative and qualitative data analysis, and the third sub-question is addressed through qualitative data analysis.

2.2. Sampling

To recruit the sample from the population ($n = 36,388$) for this study, a poster designed explaining the project was emailed, together with a volunteer participants registration link, to all Deans of the Faculties and/or Heads of Departments in five ($n = 5$) Sri Lankan universities. All of them agreed to circulate the poster and the registration link among their 2nd-year STEM students. After volunteers had registered via the link, the necessary strata (gender and membership of either the Sinhalese, Tamil, and Muslim groups in SL) were identified and their status as STEM students was checked. Stratified sampling (Thomas, 2020) was combined with maximum variation sampling (Cohen and Crabtree, 2006). This was so that each group of four students (six groups in total, $n = 24$) comprised a balanced representation of all target groups: Muslim, Sinhalese, and Tamil. Moreover, there were two male and two female students allocated to each group for a gender balance. All groups comprised four students who were each from a different Sri Lankan state university to better ensure that there were no already established friendships in play. Overall, the aim was and so to reflect the diversity of the target population (Thomas, 2020).

2.3. Data collection

A mixed-methods approach was used to collect and analyse data. Primary data were collected using five tools: video recordings of all the group work meetings,¹ focus groups/interviews,² ethnographic field notes, and two questionnaires, i.e., a questionnaire on previous group work experiences (Gilbert, 2016; University of Hertfordshire, 2020), and the Compassionate Mind Foundation's Compassionate Engagement and Action Scale. Both questionnaires were administered before and after the CSCC intervention. The overall procedure comprised three phases as explained next.

2.3.1. The pre-intervention task-focused meeting

First, each of the six groups of $n = 4$ students per group participated in a video-recorded (control) task-focused group discussion as follows. Each student presented a self-chosen research article related to their STEM field and then the whole group

1 A group meeting consisted of each group member presenting a self-chosen journal article followed up immediately after by the whole group's discussion of that article as presented.

2 Mainly focus groups were conducted with each group before and after the CSCC training. However, interviews were conducted with those who had some technical difficulties or other commitments where they could not be present for the whole of the focus group meeting.

discussed it. In other words, this procedure was repeated for all four students in each group for all six groups.

Then, students participated in a video-recorded focus group and/or semi-structured interviews to explain their lived group work experiences of this meeting (the control). They were invited to share their past lived experiences of any previous online task-focused group work meetings they had participated in, including as a result of the pandemic.

Furthermore, students filled in the two above questionnaires provided online (see these in [Supplementary material 1, 2](#)). The data from this first use of the two questionnaires were kept for comparison with data from the second iteration of the two questionnaires after the second task-focused presentation and discussion team meeting and follow-up focus group (after the intervention).

2.3.2. Intervention

The Cognitive Skills of Compassionate Communications (CSCC) for task-focused group work meetings were taught to students through a 90-min intervention session. During this interactive intervention session, the key theory of compassion in terms of brain function was introduced to the group members. This included an explanation of the psychobiological model of compassion (Compassionate Mind Foundation) so that students could understand the science-based rationales by using the following practical strategies of CSCC that were introduced next to help students demonstrate their full attention to all others in the group.

2.3.2.1. Non-verbal examples

When others speak: Nodding, encouraging (e.g., thumbs up and smiling) including to show agreement and/or understanding; or, indicating lack of understanding, e.g., by facial expression and/or hand waving; or else waving to call for a turn without interrupting (digital or physical hand waves).

NB: Thus, it becomes clear to students why the support of each other's psychological safety, as others protect theirs, requires camera use across the group.

Allowance of reasonable silence to let the group think and process what has been said so far without jumping straight in at the expense of (shyer and/or international) students hoping to speak.

2.3.2.2. Verbal examples

Using warm voice tone and group members' names to:

Intervene in non-contributing behaviors by inviting the quieter student(s) to add their view if they would like to. All other members are equally responsible for offering these opportunities *in this way*, during the meeting.

If/when a speaker "freezes" (c.f. threat system activation), others may prompt to help, not opportunistically, take over the talk. Or, the speaker in difficulty may ask another for help, e.g., "could you help me out here please, Ahmed?"

Intervene in monopolizing behavior, by *validating* the monopoliser for a ("useful"/"relevant"/"crucial"/"helpful"/"key"/"interesting")

point just made and why it was so (before e.g., going on to invite another to speak, as above).

Thanking/complimenting others for their contributions; with reasons where useful, critically.

Demonstrating in the discussion that close attention was paid to each speaker, e.g., through *relevant* responses, such as questions, points, perspectives, and/or ideas.

The above examples are the key, evidence-based features of compassionate communication strategies (for team meetings) offered during the intervention 90 min intervention workshop.

2.3.2.3. Interactive aspect of the workshop

To assist in the learning of these, the interactive component of the workshop included:

Inviting students to explain a group work that had taken part in so the others to discuss, so that everyone had the chance to put into practice the above skills. The instructor attempted to disrupt the flow of shared talk as a monopoliser and then as a non-contributor for the group members to employ the above compassionate strategies to address those behaviors effectively.

Overall, the intervention sought to develop explicitly the deployment and recognition (of others') skills at dismantling monopolizing/dominating behaviors, including by non-verbal means, without silencing anyone. It was, further, to address non-contributing behaviors, again using a warm voice tone, name, and also critical thinking to invite quieter students frequently into mindfully created safe spaces to contribute to the group discussion. The teacher/trainer was always the same for each group. The CSCC training session was conducted in the English language.

2.3.3. Post-intervention

After the CSCC session, the same groups of four students conducted a task-focused group work meeting online—this time bringing a *new* self-chosen article. The group decided on the order of presenting their journal articles and inviting the first group member to present their self-chosen article, and then others for discussing the content of the article. This repeats until all four members present their articles and all four members contribute to each discussion.

Then, each student filled in the same two questionnaires they had completed for the pre-intervention so that results between pre- and post-intervention could be compared. Next, the students participated in a new focus group and/or interviews to explain their lived learning and social experiences of this second group meeting [in comparison with (i) the control discussion above in which they had participated].

These focus groups/interviews were conducted after each group meeting (pre- and post-intervention) to collect responses to each group meeting experience from the respondents. This enabled the exploration of any changes in responses to the post-intervention meeting compared to the pre-intervention meeting. It should be noted that none of the participants was a native English speaker and that all names used to refer to them below are pseudonyms.

2.4. Application of shared virtual background

As this was action research (Lewin, 1946; Kemmis and McTaggart, 1982), after understanding the possible negative impacts of background distractions during the pilot study,³ the potential use of shared virtual backgrounds was explored with all participants as an amendment to the initial research design.

- i This could create virtual, visual boundaries around each student within a single commonly experienced background/environment. This would limit the visual fields so that no group member would be visually aware of the presence of anyone outside the group.
- ii Exaggerated body movements, e.g., turning away to communicate outside the group, would be highlighted to the whole group because the student would likely completely disappear from the screen.

2.5. Data analysis—Quantitative data

The quantitative data were collected from the pre- and post-intervention task-focused group work meetings and the two questionnaires.

2.5.1. Screen gaze behaviors of the group members

Screen gaze behavior data of the group members (during the pre- and post-intervention task-focused group work meetings) were quantitatively analyzed using three tools: Wilcoxon Signed-Rank Test (King and Eckersley, 2019) using R, and plots created using R and MS Excel. These were applied to data derived from second-by-second analysis of every group member's video-recorded screen gaze behaviors, i.e., during every presentation and every group discussion during both the pre- and post-intervention task-focused group work meetings. The data were then entered into R to perform the Wilcoxon Signed-Rank Test to explore whether there was any statistically significant difference between the screen gaze behavior of the group members before and after the CSCC intervention. For the next stage of analysis, R plots were created to identify and compare group members' screen gaze behaviors individually, according to their real-time roles, that is, when they were (a) presenting their second chosen journal article, (b) listening to others presenting, or (c) discussing during the group meetings. Finally, the overall percentage of each group's screen gaze data before (pre-intervention) and after the CSCC intervention session (post-intervention) were used to generate graphical illustrations of the groups' results during each presentation and each follow-up discussion through MS Excel scatter charts.

³ A pilot study, referred to in the study (Jayasundara et al., 2022), as Cycle 1 was conducted prior to this study (Cycles 2 and 3) as part of an, overall, action research project. The pilot/Cycle 1 was carried out among two groups of international/Sri Lankan STEM students ($n = 8$) studying in five UK universities in preparation for the study reported here.

2.6. Data analysis—Qualitative data

The overarching approach taken to identify key themes arising from the transcriptions of group work meetings and focus groups/interviews was Template Analysis (TA; King, 1998, 2004; Brooks et al., 2015). To support the use of TA, NVivo (Pro 12) was used to code the data.

2.6.1. Analysis of pre- and post-intervention group work meetings transcriptions

Transcriptions of all pre- and post-intervention group work meetings and focus groups were uploaded into the NVivo (Pro 12) for analysis. The $n = 12$ transcriptions (i.e., for six groups before the intervention, and then again afterward) were repeatedly trawled for codes that might otherwise be missed, and this also allowed constant cross-coding within each of the identified themes. In coding data, first free codes (grouping similar words, phrases, and meanings) were identified. Then, focused (interpretive) codes (grouping the codes that convey similar meanings or contribute to constructing a single argument) were identified to derive interpretive meanings (King and Horrocks, 2010). As the third and final step in the data coding, it was possible to identify what the emergent overarching themes were.

Video recordings of task-focused group meetings were made while student groups conducted their pre- and post-intervention group meetings. This is in keeping with extant research on optimal task-focused, online discussion group size. Transcriptions of pre- and post-intervention group work meetings were analyzed separately by applying TA. To identify the themes, the coding of data was carried out in the same manner as outlined above. Next, the themes that emerged from the pre-intervention group meetings were compared with the emergent themes from the post-intervention group meetings.

2.6.2. Analysis of pre- and post-intervention focus group/interview transcriptions

The focus groups/interviews conducted after each pre- and post-intervention group meeting were also video recorded and transcribed. All focus group/interview transcriptions were uploaded into NVivo (Pro 12), and the data were coded using the same procedure as above. Then, the themes that emerged from the pre-intervention focus groups/interviews were compared with the emergent themes from the post-intervention focus groups/interviews.

2.6.3. Micro-ethnographic analysis

In addition, a close analysis of the video-recorded student behaviors was carried out using McDermott's (1988) micro-ethnographic methods for analyzing filmed classroom behaviors. Specifically, in this study, McDermott's methods were used to analyse the behaviors of each respondent in their meetings before and after their training in CSCC.

The second-by-second micro-ethnographic analysis was conducted to identify changes in time spent by respondents' on-screen gaze time attentiveness to others during both pre- and

then post-intervention. It also allowed close observation of changes in facial expressions and the mobility of these changes as students responded to each other. During this analysis, particular themes that appeared most aligned with the group's overall behaviors could be identified and compared. Any critical incidents (interactions of note), how they occurred, and how they were responded to throughout the unfolding interactions in the group were viewed repeatedly for close analysis via the video footage.

Then, the results of these both pre- and post-intervention qualitative analyses were compared to explore differences, if any, in individual and/or group behaviors after the CSCC intervention session. The analytical findings here were compared closely with other data sets, for example, student-reported critical incidents around their communicative ease or otherwise in the task-focused meetings, that they talked about during the focus group meetings. All results in the study were triangulated.

3. Results

The results of the current study indicate the practicality of developing cognitive skills of compassionate communication among Sri Lankan HE STEM students in their online group work meetings. These findings should be seen in relation to students' reports (in their first focus groups) of their lived experiences of their HE online group/teamwork before this study. The following examples were typical of what students described across all the groups, namely that monopolizing behavior by one or more students in these meetings had been common, as had non-contributing behaviors. Overall, it was felt that students had not shared equal time during their group meetings.

S10: *Definitely not. Some people are speaking a lot of time. Some guys speak less. Sometimes, some guys are not speaking* (Group 1, Transcription of Pre-intervention, Focus Group, p. 5, lines 121–122).

S18: *We always hearing hearing hearing. But in this time [during this study], we are talking* (Group 3, Transcription of Pre-intervention, Focus Group, p. 4, lines 118–119).

There was also overall agreement that it was usual for most and sometimes all students to keep their cameras switched off.

S12: *This is the first time for me [switching on the camera]. So, it was a bit of nervous...* (Group 1, Transcription of Pre-intervention, Focus Group, p. 13, lines 332–333).

S15: *... really [we] don't like to switch on the cameras because we are from a different place, ... and sometimes, the backgrounds, they are not much good* (Group 1, Transcription of Pre-intervention, Focus Group, p. 17–18, lines 492–494).

S17: *I don't I feel a bit more at ease when the camera is switched on* (Group 1, Transcription of Pre-intervention, Focus Group, p. 12, lines 397–398).

A comparison of the (pre- and post-CSCC interventions) quantitative and qualitative results revealed a significant increase in group members' social and learning experiences and how the first mediated the second. The findings illustrate how the CSCC training

TABLE 1 The Wilcoxon Signed-Rank Test p -value results for screen gaze behaviors of group members as to the roles they perform in the groups.

Group number	Types of respondents		
	Presenters	Listeners	Discussants
Group 1	0.125	0.001953	0.0002441
Group 2	0.0625	0.002961	1.526e-05
Group 3	0.0625	0.009766	3.052e-05
Group 4	0.125	0.0002441	1.526e-05
Group 5	0.1875	0.001709	0.0001526
Group 6	0.0625	0.0002441	0.0002407

resulted in group members turning their cameras which in turn led to an increase in sustained and attentive screen gaze during the post-intervention online group meetings. The results also shed light on why students switched their cameras on after learning how and why screen gaze supported others in the group, including strangers, as illustrated in the data presented below.

3.1. Comparison of group members' screen gaze behaviors before and after the CSCC intervention

To compare and contrast screen gaze and related behaviors of respondents, before and after the CSCC intervention, this section presents the results of three quantitative analyses for how the results of each might (or might not) inform each other.

3.1.1. The Wilcoxon Signed-Rank Test to compare screen gaze behaviors of group members as to the roles they perform in groups before and after the intervention

The Wilcoxon Signed-Rank Test was run in R to identify whether there was any difference in the screen gaze behaviors of the group members before and after the intervention. As explained in Section 2.4 on the quantitative data analysis, p -values have been calculated to quantify the impact of the intervention on different types of respondents, namely presenters, listeners, and discussants. Table 1 shows the results for all six groups. There are four members under each type of respondent in each group.

As indicated in Table 1, the Wilcoxon Signed-Rank Test results for screen gaze timing data in pre- and post-intervention for each group $p < 0.05$ indicated that there was a significant difference in the gaze behaviors of group members after the CSCC intervention session.

3.1.1.1. Presenters

The percentage screen gaze of all the presenters was considered independently for each group. The p -values for the presenters as shown in Column 2, Table 1 revealed an increase in sustained screen gaze with all the 12 presenters after the CSCC intervention session. However, as indicated by the relatively high p -values, the increase was found to be not statistically significant in the presenters.

3.1.1.2. Listeners (presenter's audience members)

As shown in column 3 of Table 1, there was a statistically significant increase in sustained screen gaze of those listening to the presenters after the CSCC intervention session. For all six groups, the p -value is < 0.01 , meaning the probability of the null hypothesis being true is $< 1\%$. Hence, the null hypothesis (H_0) that says there is no difference between the screen gaze behaviors of the group members before and after the CSCC should be rejected and the alternative hypothesis H_1 was accepted for the listeners.

3.1.1.3. Discussants (screen gaze behaviors during the discussion component of the group work)

As shown in column 3 of Table 1, there is a statistically significant increase in sustained screen gaze of the group members when they perform as discussants during the follow-up discussions after the CSCC intervention. Therefore, the null hypothesis (H_0) should be rejected and the alternative hypothesis H_1 was accepted by the discussants.

3.1.2. R plots to compare individual group members' screen gaze behaviors before and after the intervention

iR plots were created to analyse and show graphically the screen gaze behaviors of each individual group member during each presentation. Then, more R plots were created separately to show the screen gaze behaviors of individual group members during every follow-up discussion. Figure 2 illustrates group members' percentage screen gaze during their pre- vs. post-intervention discussions of S17's two self-chosen journal articles.

S17 was the first presenter in group 3 of six groups (so the second of the two mid-groups). She is a useful starting point for the example shown below, and her data and that of others in her group in all their roles as well (as hers) were very similar to that of all other groups (full data sets available). In this example, the orange bars represent the percentage screen gaze of individual group members before the CSCC intervention session (pre-intervention). The turquoise bars represent the percentage screen gaze of the group members after the CSCC intervention session (post-intervention).

Figure 2 shows that before the CSCC intervention session, S17 (while presenting her article) sustained her screen gaze for 32.04% of the time while S18, S19, and S20 (her listeners) sustained their screen gaze for 72.89, 48.59, and 41.55% of S17's presentation time, respectively. In contrast, after the CSCC intervention session, S17 (the presenter) sustained her screen gaze for most (92.34%) of her journal article presentation. Similarly, listener S18 sustained his screen gaze for most of the whole of S17's presentation (up from 32.04% for S17's previous presentation to 95.95%); listener S19 sustained his screen gaze for 94.14% (up from 48.59% for S17's previous presentation) and S20 sustained her screen gaze for 95.95% (up from 41.55% for S17's previous presentation). These results were found to be representative of all presenters' sustained screen gaze behaviors and that of their listeners.

Next, Figure 3 illustrates each of Group 2's members' percentage screen gaze during their pre- and post-intervention

follow-up group discussions of S17's two self-chosen journal articles.

Figure 3 shows that before the CSCC intervention session, during the follow-up discussion of S17's journal article, the discussants: S17, S18, S19, and S20 sustained their screen gaze attentiveness for 92.99, 64.97, 64.01, and 72.93% of the discussion time, respectively. In contrast, after the CSCC intervention session, S17 sustained her screen gaze through almost the whole of the discussion (99.20%). S18, S19, and S20 increased their screen gaze substantially (96.79, 95.58, and 93.98%, respectively) compared to their pre-intervention discussion in S17's article.

Overall, taking together the journal article presentations and follow-up discussions shows a substantial increase in sustained screen gaze of all group members after the CSCC intervention session.

Next, the pre- and post-intervention results of the whole group's average screen gaze during each group's presentations and follow-up discussions were explored through MS Excel.

3.1.3. Microsoft excel analysis—Group vice screen gaze before and after the intervention

In Figures 3–6 below, the Y-axis indicates each group's average screen gaze values are as follows.

- 0 = no one (0%) offers screen gaze at any time in the meeting.
- 0.25 = only one group member (25%) offers screen gaze.
- 0.5 = two members of the group (50%) offer sustained screen gaze.
- 0.75 = three members of the group (75%) offer screen gaze.
- 1 = all four members (100%) offer screen gaze.

It was found overall that the example results below were representative of participants' pre- and post-intervention screen gaze behaviors across all groups.

The blue triangles represent the screen gaze of the whole group during S17's first (before the intervention) journal article presentation.

As shown in Figure 4, blue triangles majorly on 0.5 screen gaze attention level show that only two group members sustained screen gaze during most of S17's presentation before the intervention. As can be seen in Figure 4, all four members sustained screen gaze together (i.e., at the same time) only on a few occasions (4.96% of the time duration of the presentation).

Next, in Figure 5, red triangles represent the sustained screen gaze of the whole group during S17's second (after the intervention) journal article presentation.

In Figure 5, most of the red triangles are on the 1 (one) screen gaze attention level. This shows that all four group members sustained screen gaze during most of (79.82% of total time duration) S17's presentation after the intervention. When compared with the pre-intervention (blue triangles) in Figure 4, respondents were found to sustain screen gaze notably more time in the post-intervention (red triangles) in Figure 5 in relation to the S17's journal article presentation.

These results are representative of what was also found for other groups. Figure 6 in the example below shows the average screen gaze

of the whole of the group during the follow-up discussion after S17's first (i.e., pre-intervention) journal article.

The blue triangles seen at the 0.5 and 0.75 screen gaze attention levels, respectively, indicate that only two or three members sustained screen gaze together at any time during the whole group's follow-up discussion of S17's journal article before the intervention. All four members sustained screen gaze together (i.e., at the same time) only for a few occasions.

Figure 7 below shows the screen gaze of the whole of the group during the follow-up discussion of S17's second (i.e., post-intervention) journal article presentation.

From the number of red triangles that are at the screen gaze attention level 1 (one), it can be seen that all four members of the group including S17 (i.e., 100% of the group) sustained screen gaze throughout almost all of the discussion on S17's second journal article presentation after the CSCC intervention session. This result was consistent with all groups and therefore representative of the results from all groups.

Overall, the Microsoft Excel analysis results of all groups showed a substantial increase in all groups' average screen gaze after the CSCC intervention session. In terms of triangulation, these MS Excel results offered a different comparative perspective on the group members' pre- and post-intervention screen gaze behaviors, but the results corroborated the Wilcoxon Signed-Rank Test (see Section 3.1.1) results, and the results too from the plots created through R programming language (see Section 3.1.2).

Importantly, all of the quantitative results so far do not mean that the CSCC can be regarded as the only causal factor for the behavioral changes seen in these tests. Perhaps the fact that the students were meeting again and becoming more familiar with each other was part of the reason for the quite rapid change in respondents' screen gaze behaviors.

Therefore, next, to explore what might, or might not, have contributed to the rapid changes in screen gaze behaviors identified above, the results of the micro-ethnographic (micro-observational) data analysis are explored, which informed the above results. First, a summary of the results found through micro-ethnographic analysis of the pre- and post-intervention group behaviors of the respondents is presented.

3.1.4. Micro-ethnographic analysis

Micro-ethnographic field notes of the pre- and the post-intervention group meetings were analyzed, and the results were compared to explore for any differences/similarities in respondents' behaviors before and after the CSCC intervention session.

Here is an example from the pre-intervention screen gaze behavior of S17 during her presentation to her fellow group members. The behaviors seen in Box 1 and Box 2 below were characteristic, pre-intervention, of all the participants in all groups when they were presenting to the rest of the group. That is to say, the results for pre-intervention screen gaze attentiveness during the task-focused meetings were found to be similarly fragmented, erratic, and unpredictable across all participants in both UK groups irrespective of close examinations through the videos for disconfirming evidence of this from any group member.

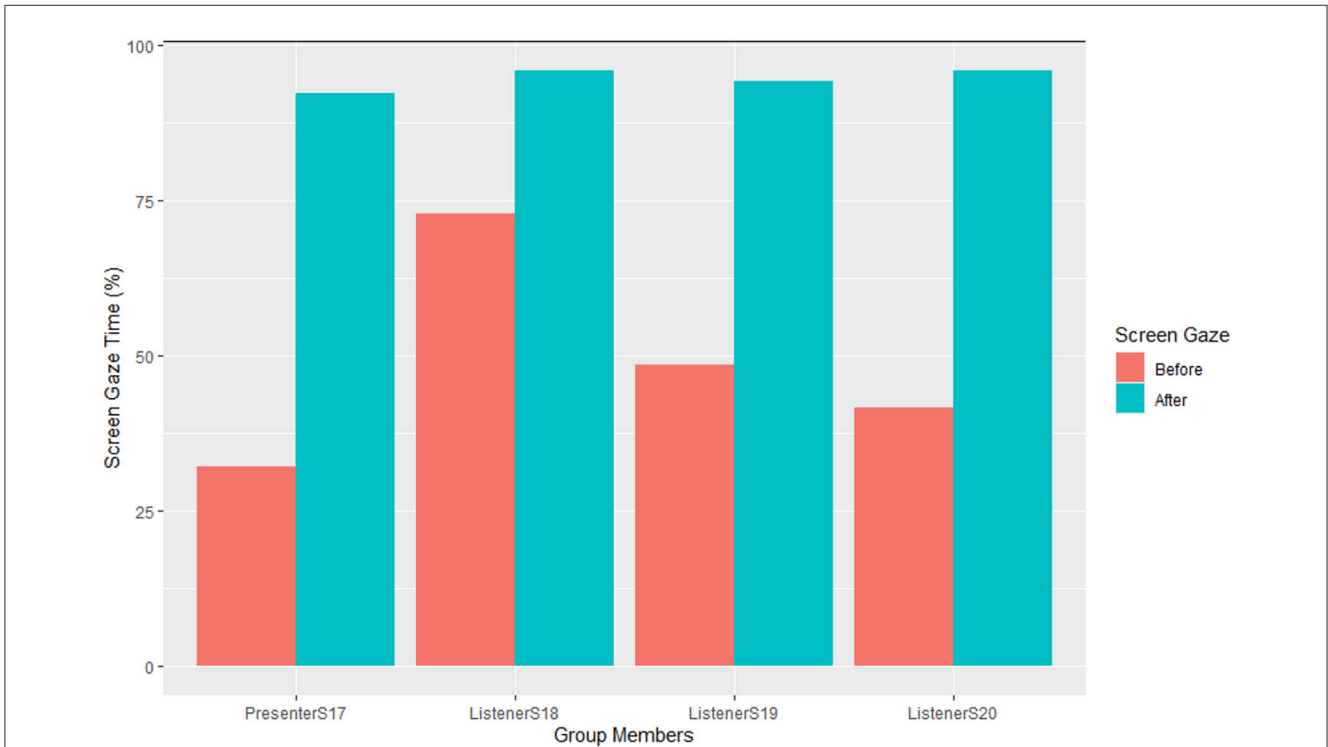


FIGURE 2 Group members' screen gaze during S17's pre- vs. post-intervention journal article presentations.

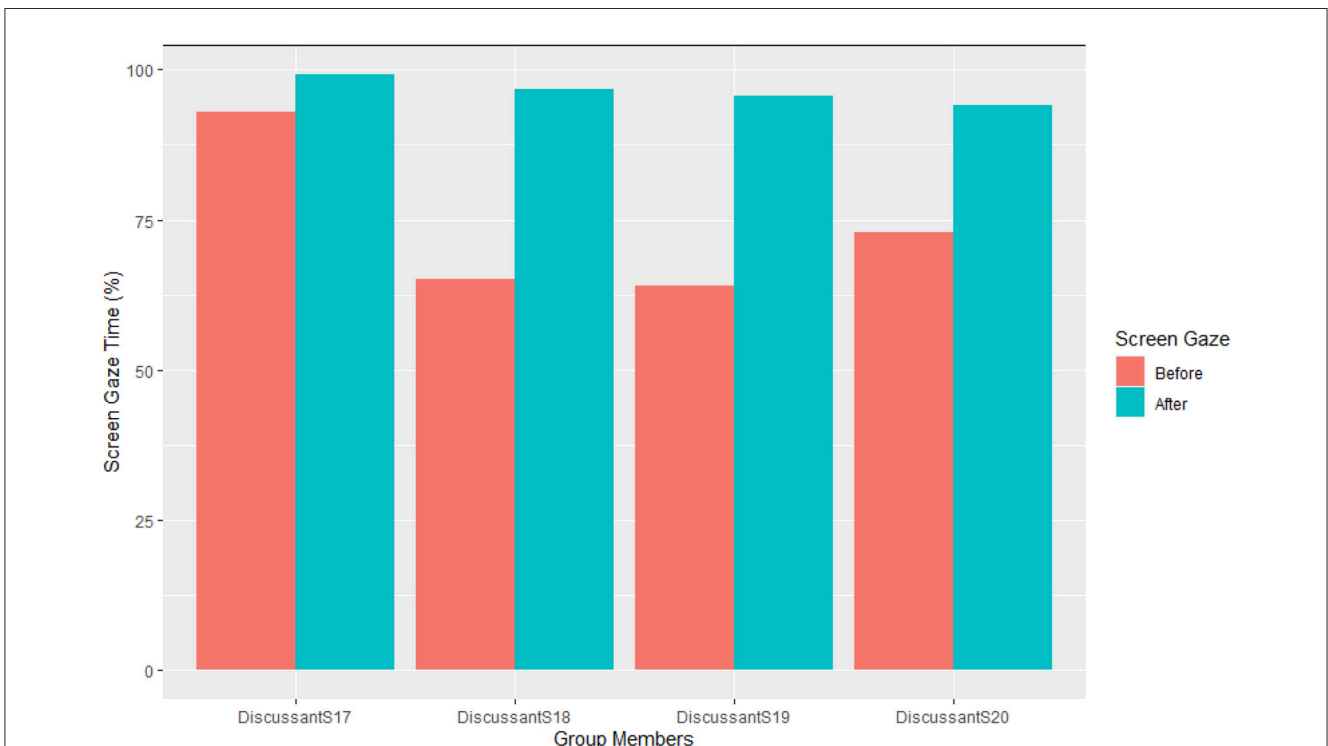


FIGURE 3 Group members' screen gaze during S17's pre vs. post-intervention journal article presentations.

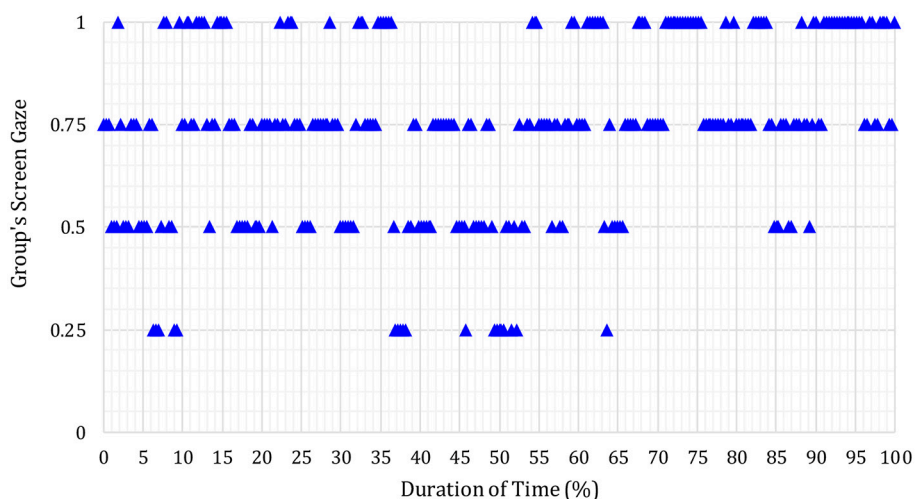


FIGURE 4 Whole group's screen gaze during discussion on S17's journal article (post-intervention).

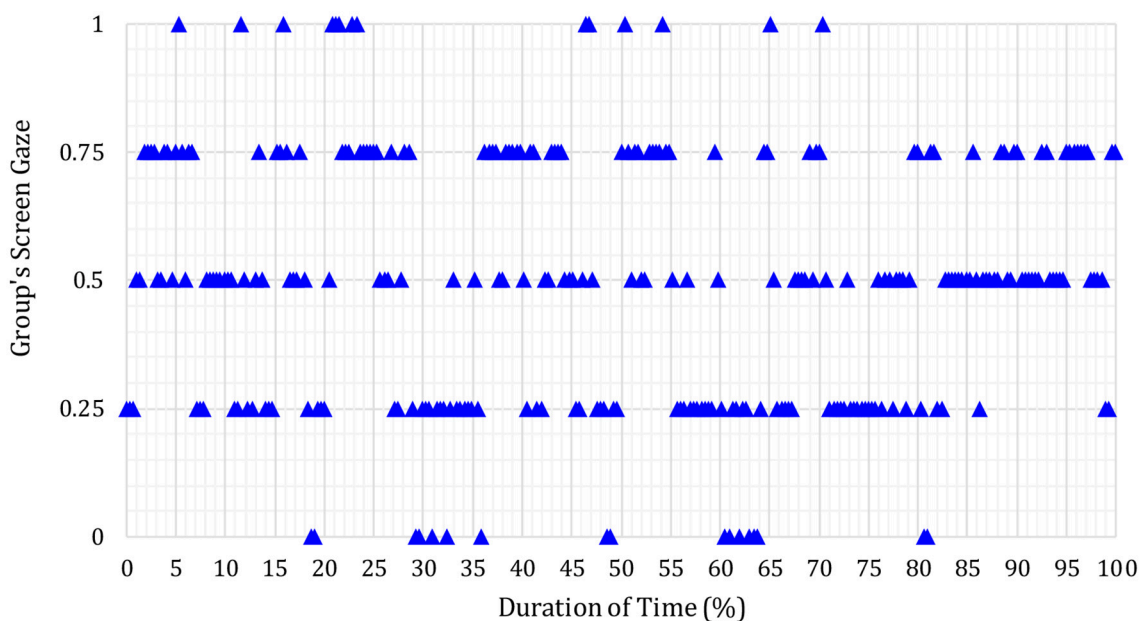


FIGURE 5 Whole group's screen gaze during S17's pre-intervention journal article presentation.

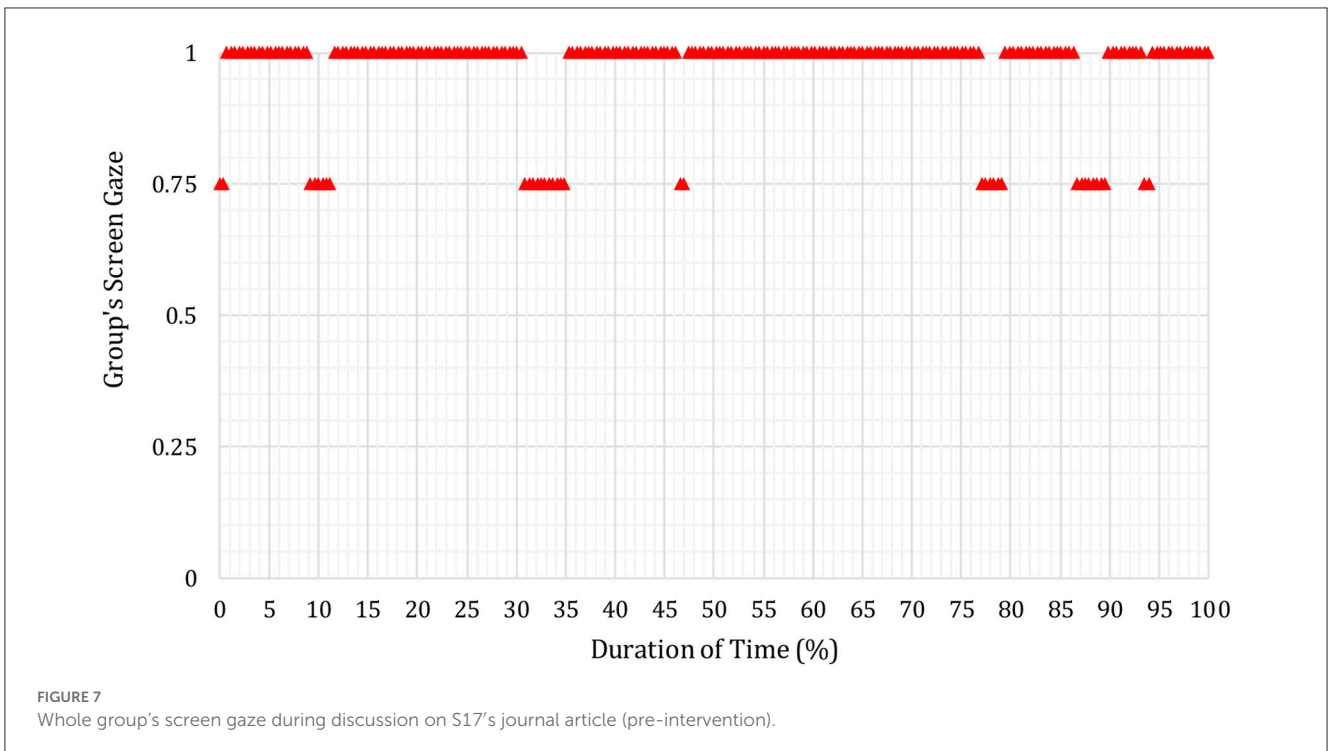
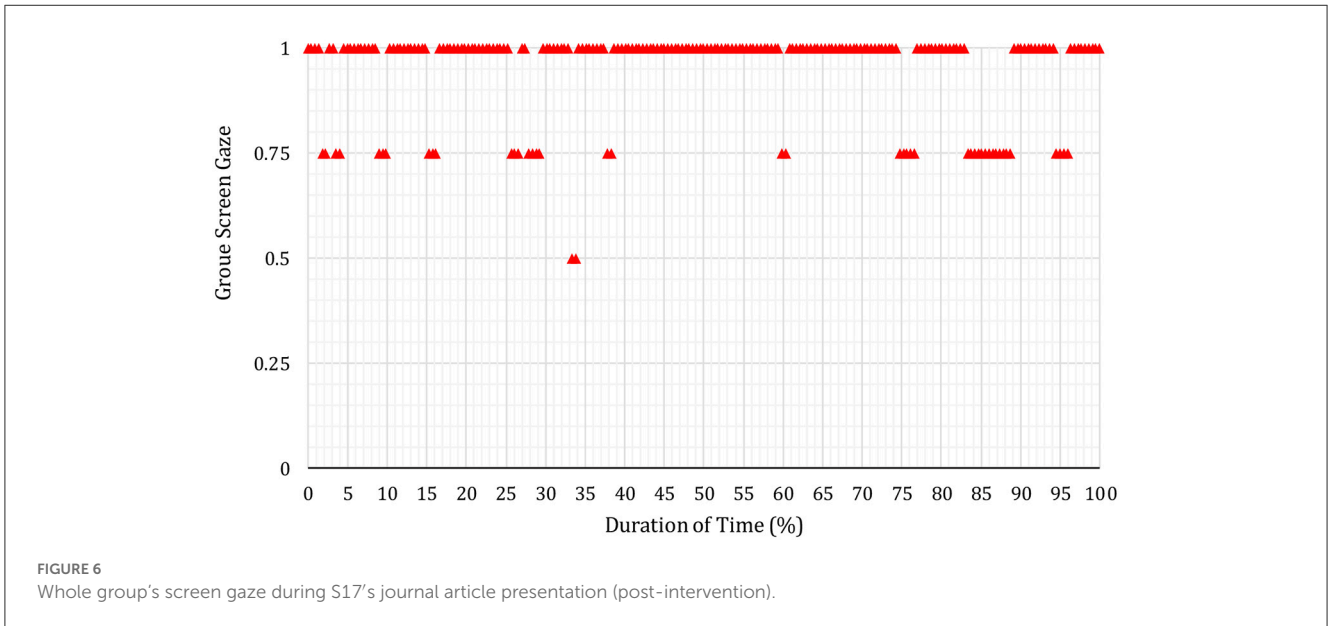
Notably, the results on screen gaze behaviors of group members during the pre-intervention were found to be erratic and unpredictable across all participants. This again was despite the close search through the videos for disconfirming evidence of this by any group member. Overall, it was found that screen gaze was better sustained across the groups after the CSCC intervention session as shown in [Box 3](#) and [Box 4](#). These data inform and appear to corroborate what was found in the quantitative data above in Sections 3.1.1, 3.1.2, and 3.1.3 regarding screen gaze. Importantly, these micro-ethnographic field note findings were found to be representative of all groups.

Next, the emergence of screen gaze as a theme through students' accounts for the change in their screen gaze behaviors is

discussed with the examples extracted from the transcriptions of focus groups.

3.1.5. Template analysis of the focus group transcripts (NVivo Pro 12): turning cameras on/off

In the pre-intervention focus groups, students reported a common reluctance—their own and others'—to turn cameras on (even if they could) during their previous group meetings on their programmes and not just during the pre-intervention group meetings of this study. Again, social anxiety appeared to be the main reason that students described feelings of unease about their



personal appearances and/or the appearance of their personal physical backgrounds (e.g., of their rented rooms), seeing that people including strangers were watching them, the belief that they could talk more confidently with the camera switched off and even engaging in other work at the same time as their group meetings were taking place. Example extracts from focus group transcripts are presented next.

S10: *If we switch off the camera we can talk confidently more than switch on the camera. ... Because sometimes friends [were] watching me. That is very excited to me [sic], very nervous*

because everyone is watching me (Group 1, Transcription of Pre-intervention, Focus Group, p. 13, lines 341–342).

S22: *... we usually don't like switch on the camera and switch on the microphone as well ... if we have anything to ask, on that time only we unmute and ask, and the other times we usually don't do. ... this is my first ever experience I had switched on it [camera]* (Group 1, Transcription of Pre-intervention, Focus Group, p. 11, lines 373–377).

In contrast, the general reluctance (across all groups) to switch on cameras was found to be reduced after the CSCC intervention as

BOX 1 Micro-ethnographic field notes during S17's journal article presentation (pre-intervention).

Group 3/pre-intervention screen gaze and related behaviors of group members during S17's presentation

Total time duration: 4 min and 44 s.

1. S17 breaks screen gaze for a combined total of 3 min and 13 s with the group during her presentation.
2. The presenter appears to be reading much of the time with her head down. she looks to be breaking the optimum gaze without maintaining eye gaze with other group members for most of her presentation, she presents while looking at her notes. She only occasionally and briefly connects with other group members through screen gaze.
3. After this, S18 looks to his right and it appears, he does something with his hands while non-verbally communicating with another person outside their group. Afterward, he fixes his gaze downward and time to time looks to his right, breaking his screen gaze for a combined total of 1 min and 17 s during S17's presentation.
4. S19 also looks to his left and up most of the time while touching his chin and scratching his nose with his hands, and then he fixes his gaze downward and after that circles his eyes around breaking screen gaze for a combined total of 2 min and 26 s and seldom looks at the screen.
5. S20 also looks to her right and time to time turns off her webcam. After that, she continuously looks down breaking screen gaze for a combined total of 2 min and 46 s.

BOX 2 Micro-ethnographic field notes during S17's presentation (post-intervention).

Group 3/post-intervention screen gaze behavior of group members during S17's journal article presentation

Total time duration: 3 min and 42 s.

1. S17 breaks screen gaze for a combined total of 17 s, and she sustains screen gaze during most of her presentation.
2. S18 breaks his screen gaze for a combined total of 9 s but otherwise sustains his screen gaze during the rest of S17's presentation.
3. S19 breaks screen gaze for a combined total of 13 s and all the other time he sustains screen gaze.
4. S20 breaks the screen gaze only for 9 s during S17's presentation and all the other times she sustains the screen gaze.

BOX 3 Micro-ethnographic field notes during the discussion of S17's journal article (pre-intervention).

Group 3/pre-intervention screen gaze behavior of group members during the discussion on the journal article presented by S17.

Total discussion time: 5 min and 14 s.

1. During the discussion of the journal article presented by S17 for 5 min and 14 s, S17 breaks screen gaze for a combined total of 22 s.
2. S18 breaks screen gaze (looks downward, left side, and looks away) for a combined total of 1 min and 50 s.
- S19 breaks screen gaze for a combined total of 1 min and 53 s as he looks away.
3. S20 also breaks screen gaze for a combined total of 1 min and 15 s during this discussion as she looks down and then she turns off her webcam for the rest of the discussion.

BOX 4 Micro-ethnographic field notes during the discussion of S17's journal article (post-intervention).

Group 3/post-intervention screen gaze behavior of group members during the discussion of the article presented by S17.

Total discussion time: 5 min and 14 s.

1. After S17 presents her journal article, the group discussion of it lasts for 4 min and 9 s. S17 sustains screen gaze throughout the whole discussion time, except for a 2 s break in her screen gaze.
2. S18 breaks screen gaze for a combined total of 8 s, and he sustains screen gaze throughout all the other discussion time.
3. S19 breaks screen gaze only for a combined total of 11 s. He sustains screen gaze during most of the discussion of S17's journal article.
4. S20 breaks screen gaze for a combined total of 15 s and she sustains screen gaze during most of the discussion of S17's journal article.

students stated that they preferred to speak with their cameras on in online group meetings during the post-intervention focus groups, as here:

S10: ... definitely it was changed, before I usually speak without camera but now I am comfortable with camera [switched on] (Group 1, Transcription of Post-intervention, Focus Group, p. 8, lines 246–247).

S11: Before this meeting I felt, switch off the camera and speak. And now I am okay, I got confident from this [CSCC] (Group 1, Transcription of Post-intervention, Focus Group, p. 12, lines 313–314).

During the post-intervention focus groups, respondents pointed to their practical use of CSCC as a key factor in turning on their cameras (in contrast to their past practice), and also in sustaining screen gaze attentiveness to their group members online. This student-reported motivation to turn their cameras on

appeared to have not only arisen because cameras facilitated group members' observations (noticing) of their own and others' non-verbal communications as a means to demonstrate validation of others' efforts but also, if someone needed help in understanding or encouragement to speak or continue speaking, others could now see this requirement if they paid attention (i.e., "noticed" c.f. the definition of compassion). Hence, this ability in the teams to "notice" appeared to help them develop their own compassionate strategies, e.g., circumlocution (rephrasing of some points) for their fellow non-native English speakers, so that no one should be disadvantaged because of lower levels of English understanding (e.g., as related to different socio-economic backgrounds). Here are more examples of students' purposeful micro-observations of each other.

3.1.5.1. Presenting

S13: ... when I was presenting my research article, I saw facial expressions of the others. I saw that Shivani, she listened well. I think Shenab listened well, and she also could get something. So, I can get something from their facial expressions. That is how it helps (Group 2, Transcription of Post-intervention, Focus Group, p. 6 and 7, lines 162–165).

S18: ... while I am [was] continuing to present, the presentation, my other group members are [were] nodding head and appreciating, so, those supported continuing my presentation. It's a credit for my presentation in a good way and very helpful to me

(Group 3, Transcription of Post-intervention, Focus Group, p. 2, lines 52–55).

S19: *When presenting, giving our facial expressions, the facial expressions motivate them* (Group 3, Transcription of Post-intervention, Focus Group, p. 5, lines 164–165).

S34: *Switching on the camera and talking [is better], because we can see their reactions, whether they understood or not* (Group 6, Transcription of Post-intervention, Focus Group, p. 15, lines 515–516).

3.1.5.2. Listening

S13: *...during the discussion we used eye contact and also really, I try to listen very well* (Group 2, Transcription of Post-intervention, Focus Group, p. 3 and 4, lines 75–78).

S20: *When they speak, we show our reactions for them to engage* (Group 3, Transcription of Post-intervention, Focus Group, p. 5, lines 140–142).

S34: *... we noticed each and everyone's facial expressions and also they showed, whether they understood or not* (Group 6, Transcription of Post-intervention, Focus Group, p. 7, lines 218–220).

3.1.5.3. Discussing

S20: *When we talk, when others talk, we observe others and also observe our facial reactions and, in our face, [facial] reactions we make comfortable, the group discussion we know how to attract or interact discussion with others* (Group 3, Transcription of Post-intervention, Focus Group, p. 2, lines 34–36).

S17: *I think it helps learning because, when we see that from their reactions, like nodding of the heads, we know that they understood what we are saying* (Group 3, Transcription of Post-intervention, Focus Group, p. 5, lines 145–146).

S30: *I think, when we use them, compassionate strategies, it can motivate people. ... we can be much more understanding of the other person or our team members. So, that will definitely motivate the group. And why we need motivation? because I mean no one wants to be in a team that is really weird. I don't want to be in a team, if the other team members don't understand me, when they're not compassionate with me, so I think when we use the compassionate strategies in teams, it motivates other people, there by promoting healthy work experience within the group* (Group 5, Transcription of Post-intervention, Focus Group, p. 5, lines 145–146).

These themes were not evidenced during the pre-intervention group meetings. That is to say, the CCSC appears to have channeled students' closer attention to their own and each other's non-verbal communications and the significance of these for communicative ease in the group.

Overall, analysis of the pre-intervention focus groups transcripts in Cycles 2 and 3 revealed that levels of psychological safety were not optimal due to social anxieties which the students explained above. In contrast, in the post-intervention focus group transcripts, students reported reductions in their anxiety. This may also explain how the groups achieved a more equalized level of agency, or participation, during their post-intervention group meetings. This means that social efforts to help others contribute led to better group

learning. Overall, the post-intervention discussions were longer than the pre-intervention discussions. The latter were also critically richer with students offering more explanations of the points they wished to make and/or offering examples for discussion.

3.2. Application of a shared virtual background

Many background distractions/activities were going on sometimes in students' home environments. Therefore, each group was asked if they might like to choose a virtual background that they could share to reduce the effect of such distractions. One group opted for the zoom background immediately below (Figure 8). The other five groups asked for a selection to be provided, and so in line with the beach background here, a selection of 10 was offered that also drew on natural surroundings and could be considered soothing in line with the three circles model of the Compassionate Mind Foundation (see Figure 1, above). Three out of ten of these images were of natural and authentic featured backgrounds from Sri Lankan nature. Three groups opted for one of these three (see Figure 9 below). The other two groups chose the image in Figure 10, below.

3.2.1. Analysis of focus group transcriptions

This part of the analysis discovered positive insights from the group members on why applying a shared, soothing virtual background so that each group as a whole appeared to be together in one nature-themed place seemed helpful to them.

S9: *This virtual background is relaxing and is better than the normal background and it's seen if someone is distracted from the group meeting as the whole body is disappeared from the screen. Thus, we are motivated to focus attention and to be on screen* (Group 1, Transcription of Post-intervention, Focus Group, p. 16, lines 499–502).

S13: *In online meetings, we can make a peaceful mind by sharing same background* (Group 2, Transcription of Post-intervention, Student Comments, p. 1, lines 27–28).

Feelings arising from improved group cohesion were also noticed, as evidenced in these student remarks:

S17: *And you also get a feeling of sense of belongingness, because you have that same background* (Group 3, Transcription of Post-intervention, Focus Group, p. 14, lines 499–500).

S35: *By sharing this same background, I can feel everyone is at the same place. We are somehow we are at different places, but the background makes all our thoughts into one place* (Group 6, Transcription of Post-intervention, Focus Group, p. 13, lines 449–451).

These accounts suggest a good level of psychological safety, one of the key values of a shared commitment to compassion within team dynamics.



FIGURE 8

Virtual background: the Caribbean Sea with moving waves and waving leaves of a palm tree. This virtual background was obtained from the Zoom video conferencing platform.

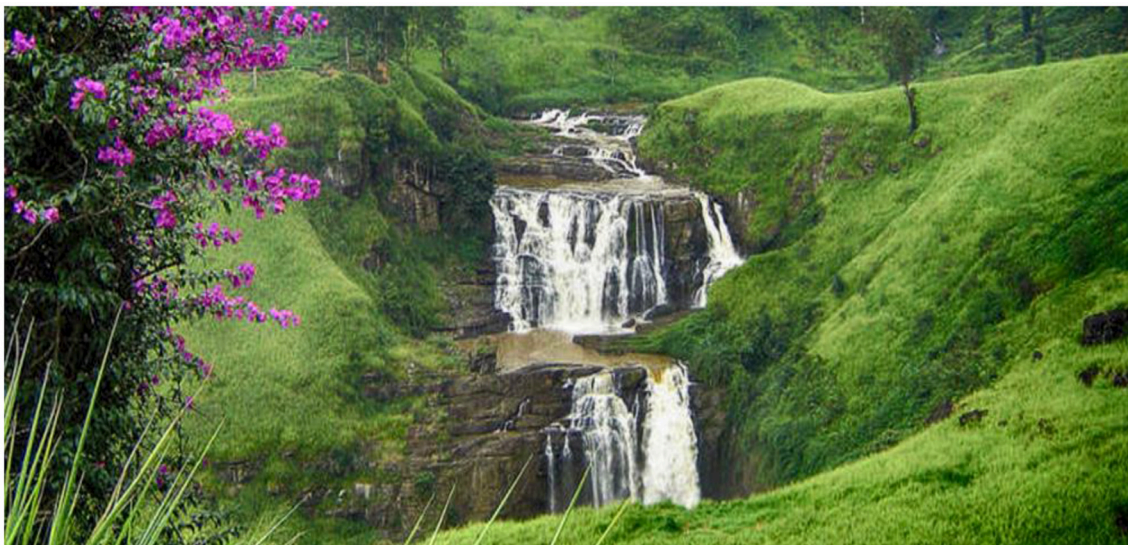


FIGURE 9

Virtual background: Sri Lankan greenery hillside with St. Clair fall. This image was obtained from: <https://www.srilankatailormade.com/rainbow-tour-in-sri-lanka/>.

In addition, the shared virtual background further helped participants overcome avoidant screen gaze, in that outgroup distractions were reduced as no one in the group could see these beyond the shared background.

S13: *It [shared background] motivates me to present in the group [the] whole time without distracting* (Group 2, Transcription of Post-intervention, Student Comments, p. 1, lines 29–30).

S29: *A big focus for what we are doing here in the group work. It really helps us to concentrate what we are doing right now, at the*

moment. I'm not getting any distractions from our environment, or problems. So, as an example, if there's no background, I'm really sure that you also can see the cockroach that was attacking me. So, it distracts others too, so that it's a really good thing to have a background in future (Group 5, Transcription of Post-intervention, Focus Group, p. 15, lines 540–545).

Furthermore, if a group member turned away from the screen and toward such a distraction (e.g., someone in their room speaking to them as occurred pre-intervention), that student's whole physical



FIGURE 10

Virtual background: opened window to a green environment (design by Melissa Lee of bespoke only; photo by T. Y. Cole). This virtual background was obtained from: <https://www.mydomaine.com/interior-design-zoom-backgrounds-4842797>.

presence disappeared immediately and entirely from the group. This sensitivity of the shared background appeared to increase students' focus on their on-screen team members.

However, with the issues of network connection and supportiveness of devices (laptops and mobile phones), some students could not apply the common virtual background because they had to connect to the discussion through their phones. On such occasions, the other team members were seen (post but not pre-intervention) to make greater efforts to elicit input to discussion from students in this situation.

Overall, the above findings shed light on the advantages of the application of a shared virtual background in terms of avoiding background distractions as it facilitates students to focus on what they communicate as a group. Furthermore, this shared virtual background effect undermined the disadvantage of socio-economic differences that might otherwise be exposed to others in the group (e.g., if a student joins from their bedroom and another joins from a luxurious study room).

S19: ... like Palavi said, that's also true: we are focusing on others' faces, body with this common background and also ... we all [are] in a [the] same level in a group or in a discussion, we are not like one or two persons in up or others in lower. Using this common background, we are in [on] the same level (Group 3, Transcription of Post-intervention, Focus Group, p. 14, lines 492–495).

S22: We are given the feeling that we are in the same environment and not like a distance like we are virtually connected, but that, like using the same background for all the people, it will give something like we're in same the same environment (Group 4, Transcription of Post-intervention, Focus Group, p. 21, lines 731–734).

This too is compassionate “noticing” for the psychological safety of others, which appeared to mediate both social and learning experiences in the group, as follows.

3.2.1.1. Learning experience across the group

If not looking at the screen, a speaker might fail to observe the non-verbal behaviors of students who may be signaling, even unconsciously, that they do not understand parts of the presentation, whether that is conceptual, or because of spoken English language errors or accent, or difficulties of English comprehension such as from the rapid speed of others' speech. Even a small frown or moving/turning of the head may signal to the speaker that they should repeat or/and rephrase a point. Observing these signals is useful, in particular, if listeners do not wish to verbally interrupt the presentation. Furthermore, if listeners do not understand and cannot signal potential difficulties non-verbally to a presenter who is not looking at them, a follow-up discussion might prove difficult. Not attending to non-verbal cues will therefore not only affect the listeners trying to communicate their difficulties in

following what is said but the whole group's learning experience in terms of the quality of criticality of the discussion that follows because some members may lack the comprehension they needed to participate. Both groups experienced such a problem during the pre-intervention group meeting.

3.2.1.2. Social experience across the group

- i. If the presenter does not sustain screen gaze with the listeners, this may cause the listening group members to dissociate from their compassionate role of supporting the current speaker. This is true for the screen gaze of all students in the group, particularly for the speaker. This may lead to there being no perceived necessity for listeners to sustain their own screen gaze because evidence of their attention to a speaker is not noticed by that speaker; then listeners may feel that their supportive behaviors are pointless. In the online group format, in particular, the listeners may then become more susceptible to distractions in their physical environment.
- ii. The speaker who does not sustain screen gaze with the listeners is most likely to also miss other highly communicative non-verbal signals of engagement from the listeners. Nodding and smiling are useful signals of understanding and/or encouragement to the speaker to continue. Turning/moving heads from side to side, frowning or expressions of puzzlement, or blank looks may be useful signals to the speaker that he/she is not communicating successfully at this moment, and should repeat, and/or rephrase, and/or slow down or simply stop and check understanding around the group.
- iii. If the listeners do not sustain screen gaze with the presenter/speaker and other group members, they fail to notice if the presenter/speaker needs any encouragement or support to continue or if any group member/s needs further explanations to understand. This failure to notice one another's behaviors might affect achieving group tasks.

3.3. Analyses of two questionnaires

Below are the findings from the two questionnaires that were analyzed using the Wilcoxon Signed-Rank Test.

3.3.1. Statistical analysis of questionnaire 1—On group work behaviors

The findings show changes from pre-intervention negative group behaviors (itemized in the questionnaire) to more positive post-intervention behaviors, that were statistically significant as shown in Table 2. It could be seen that the changes related, respectively, to what the students observed of their own group work behaviors; what they observed of others' group work behaviors; what they reported of their confidence to engage in group discussion; and their views on the influence (if any) of group discussion behaviors on learning.

These results may suggest an increase in students' "noticing" their own less helpful behaviors in group discussions.

TABLE 2 Wilcoxon Signed-Rank Test results—Questionnaire 1: group work behaviors (the pre- vs. the post-intervention).

Item no.	The negative group behaviors decreased from pre-intervention group meetings to post-intervention group meetings with statistical significance	p-value
Self-observation of group work behaviors		
4.2	Talking a lot so that others do not get many chances to speak.	0.039
4.3	Talking in silence when shy members are getting ready to speak.	0.028
4.7	Talking over others.	0.026
Observed behaviors of other group members		
5.1	Talking a lot so that others do not get many chances to speak.	0.003
5.2	Talking in silence when shy members are getting ready to speak.	0.017
5.4	Using difficult language terms or expressions without explaining so that other people in the group may not understand.	0.010
5.5	Not listening carefully to other peoples' ideas.	0.009
5.6	Not helping other people when they are getting into difficulty while they are speaking.	0.003
5.7	Talking over others.	0.003
5.8	Not inviting others to speak.	0.010
5.10	Speaking very little or not at all in the group.	0.011
5.11	Not even reading a little bit to bring something to the discussion.	0.020
5.12	Letting other people talk and talk without interrupting them.	0.030
Confidence in drawing others into the discussion		
6.2	How confident are you to draw others into group discussion?	0.011

3.3.2. Statistical analysis of questionnaire on compassionate engagement and action scale

The Compassionate Engagement and Action Scale developed by the Compassionate Mind Foundation identifies three aspects of compassion. They are self-compassion [contrasting strongly with the destructive competitive individualistic elements of self-esteem (Neff et al., 2007; Kingston, 2008)]; sensitivity to (recognition of) compassion received from others; and compassion for others. All three types of compassion are known to mediate each other (Compassionate Mind Foundation).

A comparison of data collected from the above questionnaire, before and after the CSCC intervention session, was made through the Wilcoxon Signed-Rank Test. Results indicated a statistically significant difference of $p = 0.5$ in students' responses (between pre- and post-CSCC) to the Compassionate Engagement and Action Scale in all three types of compassion, as in Table 3.

TABLE 3 Wilcoxon Signed-Rank Test results—Compassionate engagement and action scale (the pre vs. the post-intervention).

Item no.	Items of the CEAS for which there was a statistically significant positive change in responses after the post-intervention meeting	<i>p</i> -value
Self-compassion		
1.	<i>I am motivated to engage and work with my distress when it arises.</i>	0.007
10.	<i>I think about and come up with helpful ways to cope with my distress.</i>	0.007
Compassion for others.		
14.	<i>I am motivated to engage and work with other peoples' distress when it arises.</i>	0.038
Compassion from others		
36.	<i>Others think about and come up with helpful ways for me to cope with my distress.</i>	0.050

Taken together, the two questionnaires offered further opportunities to better identify and explore changes in the respondents' experiences of self and others that might be attributable to the CSCC intervention session for online group work.

The data sets from both indicated enhancements to group members' noticing of their own and others' team meeting behaviors. "Noticing" problematic behaviors is an important component of the definition of compassion on which the intervention pedagogy is based.

Overall, the results of this study are that before the respondents were introduced to compassionate team communication strategies, there were three particular barriers to their communicative ease with each other in their online meetings. These three appeared the most effective at dissociating students from each other in their meetings. There was, first, reluctance by some participants to switch on their cameras even if their internet connections were not a problem, and this is widely reported in the literature. The second was external distractions, including communications with non-group members by listeners. The third was those article presenters, who sometimes offered very limited screen gaze attention to the group or its responses to what was being presented because of the speaker's over-reliance on reading, head down, from notes.

The study has identified that after an intervention that introduced the students to using the science of compassion with communicative strategies that they could use for themselves online, the two explicit key components of compassion (*noticing* distress or disadvantage and taking *wise* action to reduce or prevent them) were seen consistently practiced across the group, in contrast to what was seen in the earlier meetings. There was a shift in the nature of many of their verbal and non-verbal communications during their substantially increased (post-intervention) screen gaze attention to their groups. To be clear, the findings informed the change in students' previous negative group behaviors (inequality of sharing speaking time/dominating, interruptions, competitive individualism, and non-contributing) with more inclusive and collaborative interactions. These same negative group behaviors

have also been identified across disciplines in the HE classroom seminar/tutorial (Gilbert, 2016; Harvey et al., 2020).

Interestingly, the findings suggest that training the students in CSCC motivated them to use practical compassionate communication to manage their group/teamwork interactions irrespective of their ethnic, religious, or mother tongue differences. This may be the result of compassion being a universally valued concept cross-culturally (Schwartz and Bardi, 2001; Immordino-Yang and Damasio, 2007; Goetz et al., 2010; Davidson and Harrington, 2012; Van der Cingel, 2014). Similar findings in the research on compassion can be identified in previous literature where Neff et al. (2007), for example, found extensive benefits to the student of having a more interdependent self-concept.

Hence, the above all suggests changes in the neurobiological affiliation processing of the individuals in this study where it appears that the stimulation of the capacity for self-compassion helped to downregulate the brain's social threat alert system (Compassionate Mind Foundation). This happens through the release of oxytocin in the brain (Depue and Morrone-Strupinsky, 2005; Uvnäs-Moberg et al., 2015) enabling self-soothing. Colonnello et al. (2017) explain that the release of oxytocin plays a major role in supporting individuals in teams to synchronize with each other communicatively, including in anticipatory ways that aid group communications. This is relevant when students can see one another and employ compassionate non-verbal cues to promote equal participation in class discussions (e.g., through screen gaze, nodding, listening attentively, or showing understanding, disagreement, encouragement, or confusion as people speak). According to Jensen et al. (2013), the synchronizing of group members helping out a single person may be connected to the part that oxytocin plays in the brain's reward system.

4. Discussion

One of the main difficulties of online group work appeared to be constraints on the way eye contact can be used for compassionate communications practice in the classroom, where, whenever they speak, students are encouraged to "sweep" the group with eye contact as if it were a single organism (Gilbert, 2018). In line with evolutionary findings by Dal Monte et al. (2022), this has been shown not just to help the speaker read the group's understanding, but also to signal each listener that they are being spoken to individually in ways that support psychological safety. This is key in helping equalize participation around the group (Gilbert et al., 2018; Gilbert and Bryan, 2019). Screen gaze online cannot be used to observably "sweep" the group inclusively like this. Nevertheless, during the post-intervention group meetings, screen gaze was sustained much more across all groups than in the pre-intervention group meetings. Something that may have aided this is that in online, it is possible to read all faces in one single screen-sized space.

Moreover, it is important to remember that what can be seen online (faces, provided the camera is on) was evolutionarily designed to be read closely. This requires the first component of compassion and its focus on noticing. Recent research by Spikins (2015) and Godinho et al. (2018) on the evolution of human facial expressions suggests that modern humans have developed quizzical eyebrows (as *Homo sapiens* lost the strong, thick bony brow ridges

of their ancient ancestors) as a result of human evolution where effective social communication in hunter-gatherer teams became important. From this, Spikins (2015) and also Godinho et al. (2018) conclude that the evolution of smaller, flatter faces may have facilitated the social power of the eyebrow, allowing humans to communicate at a distance in more complex and nuanced ways as muscles in the face developed to move the eyebrows up and down expressively for more subtle communications.

Pertinently, Dal Monte et al. (2022) have found that eye contact between people has sophisticated neurological correlates that have evolved in our social brains for deriving significance from other people's gazes. They have identified that extracting meaning from social gaze contact involves neurons in four brain regions and have highlighted the significant influence of social gaze interaction in shaping interpersonal communications. This may explain why even online the CSCC appeared to motivate students to take care to assess responses and overall reactions of the whole group to presentations or discussions. In other words, the nature of gaze reading is changed online, but it is still crucial, and therefore also the use of cameras. Note that this is a matter of non-verbal social connectivity.

The verbal evidence for enhanced inter students' support of each other similarly aligned with the principles of non-verbal compassionate communication, as mentioned above. The study's findings are therefore in line with Vertegaal and Ding (2002), Vertegaal et al. (2002) research. Their eye-tracking study explored the role of eye gaze in group work via video conferencing. They found that when all team members believed that the speaker was looking only at them, the participation of the group members equalized and the quality of problem-solving and decision-making was enhanced (Vertegaal et al., 2002, 2003).

It is important to enact the first component of compassion for the group work/teamwork context (noticing) to fulfill the second component (taking wise actions to reduce or prevent the distress or disadvantaging of self and others). Understanding this phenomenon and the application of the CSCC practically during the post-intervention task-focused group work meetings assisted students' recognition of the advantages of switching their cameras on during their group/team meetings online. This was especially enhanced by their realization that they could offer a wide range of support to their peers by implementing what they had learned about CSCC. Hence, this approach appears to help address the multi-factorial issue of delayed or abandoned development of social relationships that could be remedied through even non-verbal exchanges in online group meetings (Butz et al., 2015; Bedenlier et al., 2020; Khalil et al., 2020). Furthermore, the current findings are important for addressing negative emotions including feelings of isolation and/or helplessness by students having had to shift to online platforms (Bedenlier et al., 2020).

Moreover, as this study has found, online meetings can offer other ways to support inclusivity and psychological safety that also help equalize participation and students' use of CSCC in online group meetings appeared to enhance group cohesion, inclusivity, and the notion of equal agency. In addition, group interactivity was statistically found to be less vulnerable to external environment disruptions.

This study on compassion as an intention (not an emotion; Compassionate Mind Foundation) suggests new avenues to enhance the productivity and inclusivity of online group work/teamwork meetings. For example, in a group of four members with cameras on, each group member can read the expressions, all on one screen, of all three other members of the group, at the same time. Compared to when a group sits around the table, this is a change of spatial dimensions for "reading" faces and their non-verbal cues and signals (e.g., confusion, approval, disagreement, and encouragement) during the meeting.

This alone may be worthy of further research in terms of how the observing social brain adapts under compassionate conditions, where oxytocin may help sync the group (Colonnello et al., 2017). This is important because of research such as that of Greenfield (2010) on identifying how the current, widespread requirement for daily digital multi-focusing is changing the architecture of children's brains in digital societies. She asserts, "if you only focused on the behavior of one player (in a game of football, for example) you couldn't extrapolate the nature and context of the game." Similarly, in their group meetings, if students focus on the speaker only (which often happens in non-CSCC-informed offline meetings), they may not also pay close attention to the immediate facial responses of the rest of the group members. However, this advantage of reading faces (in online group meetings) is only possible when attendees have their cameras switched on. Dal Monte et al. (2022) have found that eye contact between people has sophisticated neurological correlates in the human brain that have evolved in our social brains for deriving significance from other people's gazes. They have identified that extracting meaning from social gaze contact involves neurons in four brain regions and highlighted the significant influence of social gaze interaction in shaping interpersonal communications. Thus, in online meetings to express one's own non-verbal communication (especially facial expressions) while monitoring the responses and interactions of other group members, online camera use is important.

The study strongly suggested that monopolizing behavior indicates that there has been an initial activation of the threat system, remembering that the monopoliser in team meetings may often be the most anxious person in the team (Yalom and Leszcz, 2005). This is entirely plausible given the highly individualistically competitive nature of HE (Greenfield, 2010). The monopolizing behavior itself can be understood to be an outcome of the brain's drive system for successful performativity.

Finally, the study's findings demonstrated the successful adaptation of the CSCC to the online group meeting context. The findings also support the notion of Self Organized Learning Environments (SOLE) introduced by Mitra and Dangwal (2017) and Mitra (2018). In the context of this study, "self-organized" is inferred from the choice by students of the journal articles to present and discuss without a tutor taking part. The whole point of the discussion was to develop critical perspectives taken through the social interaction (in this case based on an empirical understanding of compassion) considered by the constructivists as necessary for student learning.

5. Conclusion

Limitations of this study are that it was a relatively small scale and the results of this study might not be replicated with a sample of students not in the same socio-political environment as Sri Lankan students. Moreover, follow-up of the students involved has not yet been completed to identify whether the skills they learned have helped them since. The follow-up is planned but may be complicated by new circumstances in Sri Lanka around its recent, well-documented economic crisis, during which many of its HE teaching staff have left the country (Agalakada, 2023) and this will be having a material effect on student wellbeing and success. But the study findings align with those of other studies of the motivational nature of cognitive compassion in classroom group/teamwork; it invites further research given the clear relevance of an empirically understood concept of compassion—or its absence—to team meeting processes.

The findings indicate the value of raising students' awareness of the cognitive skills of compassionate communication that they can use in their online group meetings. The results of the study have identified that after this intervention, all students in the sample were motivated to turn on their cameras and to sustain their own observable screen gaze attention to their groups, in contrast, to do what they did pre-intervention. This, in turn, did appear to develop their own group observation skill, including interpreting other group members' verbal and non-verbal meta-language communications across the group. Evidence of students' engagement with each other's presentations substantially increased with their application of CSCC and that engagement was seen in the evidence of increased understanding of the content of the presentations (This also evidenced a useful and important integration of their social and learning experiences in their task-focused meetings, post-intervention). Overall, the findings suggest that training the students in CSCC motivates them to use practical compassionate communication to manage their group/teamwork interactions irrespective of their ethnic, religious, mother tongue, or gender differences. Furthermore, the shared virtual backgrounds that are a benefit of *online* meetings created a unity of circumstance for each student and it is notable that they seemed pleased without exception to be working outside their COVID-19-mediated physically confined environments. This was an example of how the adaptation of the CSCC was much helped through a partnership with the students. We furthermore suggest that the shared background likely had some effect on the willingness of one or more students in the sample to switch on their cameras not least in relation to different socio-economic backgrounds that non-use of this background-sharing exposed.

This is important because if students' cameras are switched off, tutors might not be able to identify who is speaking, or prompting, who may be supporting the speaker unseen in their physical location, or whether a group member is script-reading when they speak to the group. Hence, the findings of this study contribute to addressing the significant dearth of existing research on the current use of video-conferencing in higher education (Al-Samarraie, 2019, p. 122) to effectively address a known, fundamental challenge

that presents in similar forms: disconnection among and between students (Wang et al., 2018; Bauer et al., 2020; Stanford University, 2020), feeling isolation/loneliness and the resulting negative psychological consequences, entrenching disconnection among and between students through online delivery of higher education (Schwenck and Pryor, 2021), lack of consistently satisfying experience for students in online educational settings due to isolation and limited interactions because of their reluctance to switch their cameras on Young and Bruce (2020). Kim et al. (2011) and Kim (2013) indicate lower levels of interactivity and less in-depth discussions. Alongside this, Author:inner group AEDiL (2021) reports on instructors feeling insecure, helpless, and frustrated as a result of students' not switching on their cameras.

With the introduction by the UK government of new restrictions on the movement of international students into UK HE, it is recommended that further studies on the nature of cognitive compassion in teamwork be carried out in other countries to best support students where they are. This study may be helpful in that regard as a methodological model, bearing in mind that not all the methods used here (to support triangulation in this study) need to be used. We suggest that for such further studies, the Microsoft Excel analysis, for example, might not be essential.

Hence, in terms of achieving better outcomes by addressing the existing issues in online group work meetings, CSCC could be a way forward. This can be not just for teaching and learning.

Data availability statement

The original contributions presented in the study are included in the article/Supplementary material, further inquiries can be directed to the corresponding author/s.

Ethics statement

The study has been reviewed by the Ethics Committee of the University of Hertfordshire (protocol code: CHUM/PGT/UH/04345, (1), (2) issued on 3 October 2019, 28 February 2020, and 20 April 2022 respectively). The patients/participants provided their written informed consent to participate in this study.

Author contributions

JJ: conceptualization, methodology, formal analysis, investigation, resources, data curation, writing—original draft preparation, writing—review and editing, visualization, project administration, and funding acquisition. TG, SK, and LM: supervision. All authors contributed to the article and approved the submitted version.

Funding

This study was funded by AHEAD Operations of Sri Lanka (Accelerating Higher Education Expansion and Development) funded by the World Bank. Grant number: AHEAD/PhD/R1/AHSS/027.

Acknowledgments

We would like to express our gratitude to the funding body AHEAD. We acknowledge the contributions of all participants and their universities.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Supplementary material

The Supplementary Material for this article can be found online at: <https://www.frontiersin.org/articles/10.3389/fpsyg.2023.1113098/full#supplementary-material>

SUPPLEMENTARY TABLE 1

Compassionate engagement and action scale.

SUPPLEMENTARY TABLE 2

Questionnaire on group work behaviors.

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OPEN ACCESS

EDITED BY

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RECEIVED 30 November 2022

ACCEPTED 11 October 2023

PUBLISHED 31 October 2023

CITATION

Krause V, Rousset C and Schäfer B (2023)
Uncovering paradoxes of compassion at work:
a dyadic study of compassionate leader
behavior.
Front. Psychol. 14:1112644.
doi: 10.3389/fpsyg.2023.1112644

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Uncovering paradoxes of compassion at work: a dyadic study of compassionate leader behavior

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In today's business world, organizations tend to overlook that employees face suffering caused by work and non-work-related events that can negatively impact business organizations in the long run. One way to address this challenge is through leadership acknowledging and alleviating employees' suffering to ensure a company's success. However, research on compassion and leadership in business settings is still relatively scarce. In this study, we aim to extend the organizational compassion literature by addressing our research question: "What are paradoxes induced by compassionate leader behavior in the workplace in the context of social hierarchy?" We conducted a qualitative exploratory study based on 12 semi-structured interviews with six dyads of leaders and their direct subordinates from small, medium, and large firms representing different industries. The findings of our study indicate that compassionate leader behavior goes hand-in-hand with paradoxical situations that both leader and member face in the workplace, supporting the proposition that compassion as a social, interpersonal process is complex and multi-faceted. Our analysis identified 6 compassion paradoxes that spring from compassion from a leader towards a member. Our study differentiates from other research of compassion paradoxes in the sense that it also focuses on the interplay between leader and member. From that perspective, the findings of our study indicate that social hierarchy is playing a crucial role and exacerbating some paradoxical tensions. This consideration implies that to be effective, compassionate leaders need to have or develop the ability to continuously transcend those compassion paradoxes, as well as support their members in transcending the paradoxes they find themselves dealing with. Thus, the findings of our study contribute to management literature in the field of Positive Organizational Scholarship (POS) by highlighting compassion as a critical element of dyadic leader-subordinate relationships that could be reinforced by systematically building more competence in leaders and members to navigate the tensions emerging from the identified compassion paradoxes. Additionally, we provide limitations and recommendations for further research, along with several theoretical and practical implications of the results, which are particularly relevant for practitioners such as managing directors, leaders, employees, human resource managers, academics, and business and HR consultants.

KEYWORDS

compassion, compassionate leadership, compassionate leader, compassionate behavior, suffering, social hierarchy, dyadic study, compassion at work

1. Introduction

Human suffering, both within and outside organizations, seems inevitable. Defined as “the severe or protracted distress people experience when an instance of pain or injury (emotional, physical, or otherwise) disrupts one’s basic personhood” (Kanov, 2021, p.86), suffering springs from many sources. It can come from illness, injury, or even the death of loved ones (Harvey, 2001), from toxic interactions with line managers, colleagues, or customers (Frost, 2003), and also from organizational processes (Maitlis and Ozcelik, 2004) or even from carrying out the “necessary evils” of work organizations (Molinsky and Margolis, 2005). This list of potential sources of suffering shows how pain (and subsequently suffering) is an unavoidable human experience. These psychologically painful experiences can be very costly, not only for the individual who is suffering, but also for the organizations who employ them. In 2003, the Grief Recovery Institute conducted a study showing that companies lose more than \$75 billion annually in lost productivity, lost business, and poor performance due to grief-inducing experiences (James et al., 2003). Furthermore, companies today are exposed to tremendous pressure, such as the challenges associated with the COVID-19 pandemic, and are forced to react rapidly to such externalities (Oruh et al., 2021). In contrast to short-notice incidents, organizations are also going through profound transformations through medium- and long-term perspectives in the hope of remaining relevant within their markets. These transformations also create a considerable amount of “pain” in organizations, which then face even more significant challenges to keep their employees engaged and committed (Elias, 2009). Hence, suffering and its associated economic impact will continue to rise in the upcoming years. More than 20 years ago, Frost (1999) stressed that leaders are more and more challenged to deal with the suffering of subordinates, regardless of industry and company size. Today, this remains more true than ever.

During the last decades, researchers have identified different constructs dealing with pain and suffering (e.g., empathy or empathetic response, emotional social support, and prosocial behavior) (Bacharach et al., 1996; Lim and DeSteno, 2016). One such construct is *Compassion*—from the Latin *compati*, meaning “to suffer with.” Even though there are many different definitions of compassion within the organizational research context, a vast and steadily growing number of organizational scholars have drawn on the definition of compassion provided by Dutton et al. (2014). Within their model of the “Interpersonal Process of Compassion,” they define compassion as a human experience comprising of the following key elements: (1) noticing suffering, (2) feeling empathetic concern, (3) sensemaking, and (4) acting to alleviate the suffering (Kanov et al., 2004; Dutton et al., 2014). We also utilize Dutton’s definition of interpersonal compassion, as it allows us to differentiate compassion from other constructs (such as empathy, emotional social support, or prosocial behavior).

While studying compassion is relatively new to the field of organizational behavior, several studies show that compassion at work makes a difference. Frost et al. (2000) demonstrated that compassionate behavior can boost people’s ability to function as productive employees. Further scholars found evidence that compassion also increases attachment and commitment to the organization (Grant et al., 2008; Lilius et al., 2008). Dutton et al. (2002) show that compassionate behavior can strengthen emotional

connections at work, and Lilius et al. (2008) outline that it can call up positive emotions and reduce anxiety. Especially in demanding transformation processes, the potential benefits of compassion highlight an alternative for organizations and their leaders in dealing with the increasing amount of suffering, as “compassion offers a potential solution for creating healthier organizations” (Shuck et al., 2019, p. 558). Lilius et al. (2012) conducted a literature review on compassion in the field of Positive Organizational Scholarship (POS) and summarized the benefits of organizational compassion, the processes supporting compassion (Dutton et al., 2002, 2006), the organizational conditions for compassion (Kanov et al., 2004), and the mechanisms of support such as compassionate policies, routines, and systems (Dutton et al., 2002, 2007; Kanov et al., 2004; Frost et al., 2006; Lilius et al., 2008).

Additionally, multiple studies have explicitly investigated the role of leaders within the context of compassion and have shown that leaders are highly relevant in legitimizing the influence of compassion in organizations (see for example Worline and Dutton, 2017). Zoghbi-Manrique-de-Lara and Viera-Armas (2019) found that ethical leadership was significantly and positively linked to compassion and peer-focused citizenship, suggesting that leaders who act morally more easily move their members to become sensitized to their peers’ suffering. Other researchers have called to integrate compassion into previous leadership models, such as servant leadership, as a skill to respond to suffering (Davenport, 2015). More specifically, initial research in the field of compassionate leadership provided the first evidence that compassion does matter in leadership and that it impacts psychological well-being, employee engagement, and turnover intent (Shuck et al., 2019).

However, despite the growing interest in other fields, research on compassionate leadership can still be considered rather scarce and needs further investigation from multiple perspectives. The current state of literature in the field of compassionate leadership and its limited empirical research is summarized best by Shuck et al. (2019) as follows:

“The specific function of compassion related to leader behavior in a work setting remains an underexamined topic across the HRD field as well as in related fields, such as management and organization development. (...) Beyond a limited number of pioneering articles, very little work can empirically comment on how compassion – a behavior that a leader might model – could influence performance within any setting” (Shuck et al., 2019, p. 538).

2. Context and objective of our study

Recently, the definition of workplace compassion and the merely positive connotation of compassion has been criticized (Simpson et al., 2014a,b). Former definitions posited that compassion is expressed by leaders towards their members and is described essentially from the perspective of the (powerful) giver and less from the (grateful) receiver (Kanov et al., 2004; Frost et al., 2006; Dutton et al., 2007; Lilius et al., 2008). Simpson et al. (2014a) underline this observation by pointing out that “in the dominant definition the subjectivity of the giver is privileged over the experience of the

receiver” (Simpson et al., 2014a, p. 354). Those definitions neglect sociological and political dynamics since they are framed from a concrete psychological position in a unidirectional manner and hence limit the range of the compassion phenomena due to the greater importance of the power relationship of the giver compared to the receiver.

In addition to the rather unidirectional framing of compassion, the previous definitions did not regard compassion as a socially constructed phenomenon intertwined with inherent power dynamics, where those involved may encounter both favorable and unfavorable consequences. On the contrary, many scholars investigating the effects of workplace compassion take an absolutist view on compassion as a virtuous and exclusively positively coined construct (Simpson et al., 2014a,b). In this context, Caza and Carroll (2012) claim that in the “large majority of POS article [...] the positive phenomenon was described as inherently valuable, but also having the happy side effect of enhancing profits” (p. 973). From a genealogical perspective, Simpson et al. (2014a) argue that within the social and organizational context, power/knowledge relations and, therefore, analytical, rational, and calculative actions are unavoidable since contemporary leaders tend an organizational arena, wherein “employees may be vicariously treated as the flock – whose obedience is to be cultivated compassionately” (Simpson et al., 2014a, p. 355). Overall power dynamics and adverse outcomes in compassion relations are often underdeveloped and underresearched (e.g., Frost, 1999; Frost et al., 2000, 2006; Kanov et al., 2004; Dutton et al., 2006; Lilius et al., 2011, 2012). The experiences of both leaders and members in compassion relations will likely be multifaceted, complex, continuous, and open to varied interpretations. Consequently, researchers call for more research to investigate organizational compassion through the lens of power dynamics and effects, taking the perspective of both leader and members, and considering the question of who benefits from what knowledge.

Therefore, we are responding to multiple calls for more research in the domain of compassionate leadership behavior by analyzing the complex interplay between leader and member. In this context, we follow the argumentation of previous research (see examples above) outlining that organizational compassion is rather multifaceted and ambiguous in implication and does not only have positive connotations. With our study, we aim to show that organizational compassion is also affected by social hierarchy and may lead to paradoxical situations. We refer to social hierarchy as the differences in power and status among organizational actors (Bunderson and Reagans, 2011). In this context, we analyze the dyadic relationship between leader and member, including both perspectives. Drawing on the work of Araújo et al. (2019) and Simpson et al. (2022), we also presume that the combination of compassion and leadership results in paradoxical challenges (Simpson and Berti, 2020; Tomkins, 2020), evoking the paradoxical poles of certain elements in the compassion context. Organizational scholars describe paradoxes as persistent mutually interdependent but contradictory tensions (Smith and Lewis, 2011). Exploring compassionate leadership through a paradox lens while taking into consideration both the perspective of leader and member constitutes an important contribution as the compassion literature has shown so far limited (empirical) investigation about the tensions experienced by compassionate leaders and their receivers. Doing so could lead to a better understanding of how compassionate leadership works in practice, both for developing theory and for

identifying practical guidelines for leaders who wish to bring compassion into their leadership practice. Motivated by that, we state our research question as follows:

What are paradoxes induced by compassionate leader behavior in the workplace in the context of social hierarchy?

3. Materials and methods

3.1. Overview and research sample

The initial study underlying this article set out to deepen our understanding of the effects of compassionate behavior in leader-member settings towards business outcomes in a dyadic study. Thus, we conducted 12 semi-structured, interrogative, dyad interviews with a sample of employees from different companies of different sizes and different industries. To this extent, our sample can be described as a convenience sample from a diverse background of four, only partially overlapping large professional networks (Etikan, 2016).

To identify dyads of leaders and direct subordinates in business organizations, we followed a purposive sampling approach to filter our sample (Palinkas et al., 2015; Bell et al., 2022). We defined a “leader” as taking managerial responsibility for at least one employee. We considered leaders and subordinates from different industries and small, medium, and large-sized firms to cover the relevant phenomena as broadly as possible, thereby ensuring heterogeneity in the sample. We required leaders to have at least 1 year of work experience to maximize in-depth insight into their role as leaders and compassionate behavior. We also required the focal dyad to exist for at least 1 year to allow for a relationship to develop, as compassion can also be related to how well people know each other (Gilbert, 2015). Subsequently, subordinates also needed at least 1 year of work experience to share sufficient practical experience.

Based on these criteria, we contacted leaders and subordinates from 26 companies in the researchers’ networks throughout Germany. Seven contacts gave no feedback and five declined to participate due to time constraints. Two were unwilling to participate as they did not fulfill the above-described criteria and ascribed their reluctance to a perceived weak relationship and insufficient exchange that would make difficult to answer any dyadic questions. In total, 12 contacts agreed to in-depth interviews. The final sample is, thus, composed of 12 participants from six dyads consisting of four women and eight men aged between 22 and 59. To ensure anonymity and openness, we conducted the interviews of each individual of each dyad separately. Four dyads stem from large enterprises, one dyad stems from a medium-sized enterprise, and one dyad from a small-sized company, representing six different sectors. The relationship duration of the dyads ranges from 1 to 3 years. The members’ (M) professional experience ranges from one to 14 years, while the leaders’ (L) management experience ranges from 1.5 to 16 years. The participants work in different areas such as International Marketing (M01; L01), Equities (M02; L02), Sales and Distribution (M03; L03), Project Management and Video Production (M04; L04), UX Design (M05; L05), and Marketing Communication (M06; L06). Due to the COVID-19 pandemic, all interviews were conducted virtually *via* Zoom and Microsoft Teams, with activated cameras. The average duration of the interviews conducted in German was 43:00 min.

3.2. Interview guidelines

Our initial study aimed at studying the phenomenon of compassionate leadership in business organizations in a broader, open-ended way through the investigation of the effects of compassion in leadership, the individual reasons for compassionate behavior, and the limits and challenges of compassion in leadership in the organizational context, while providing deeper insights into the dyads' dynamics. Therefore, we based the questions of our semi-structured interview guideline on the existing compassion literature and LMX theory (Liden et al., 1997). The team prepared the guide according to the rules of Lindgren et al. (2020), emphasizing an open-but-targeted form of questioning (Miles et al., 2020). Due to the study setup, we developed separate guides for leaders' and members' interviews. They included statements concerning confidentiality between the dyad members, prohibiting the researchers from sharing insights from previous interviews with the second part of the dyad to promote openness even in sensitive cases (Eisikovits and Koren, 2010). The guidelines were tested thoroughly in advance through two test interviews with both a leader and a member and were subsequently slightly adapted (Miles et al., 2020). The final interview guides consisted of an introduction, a main part comprising 12 questions for leaders and 11 for subordinates, and a conclusion. In addition to an icebreaker question, the first block of questions aimed at introducing the topic. After asking participants how they would define compassion, we also provided a working definition to ensure a common understanding during the interview. For simplicity, we used an updated definition from Gilbert, who defines compassion as a "sensitivity to suffering in self and others with a commitment to try to alleviate and prevent it" (Gilbert, 2014). The second block of questions sought to explore the status quo of compassion in leadership within the participants' business organizations. The questions strived to identify the general attitude toward compassion and cover all aspects of the compassion process, especially expressing, noticing, and responding to suffering. The last block addressed drivers and barriers to compassionate behavior in leaders.

3.3. Data analysis

The interviews were recorded, fully transcribed, and initially underwent a structured deductive content analysis. While the initial intent of our study was to deepen our understanding of the effects of compassionate behavior in leader-member settings towards business outcomes in a dyadic study, we narrowed our focus during the data analysis and review process leading to this article. In our preliminary analyses, two insights came to light: (a) the relevance of social hierarchy-relations and (b) the paradoxical situations which can arise in the context of compassionate behavior in organizations. In line with iterative approaches in qualitative analysis (see Srivastava and Hopwood, 2009; Miles et al., 2020), we decided to follow those insights and shifted towards inductive content analysis. From that point on, our qualitative analysis was conducted interactively with comparisons between the data and the literature (Corbin and Strauss, 2008). We first started by scanning our interviews for evidence of paradoxical tensions as defined by Smith and Lewis (2011). In particular, we were looking for evidence of poles that "seem logical in isolation, but absurd and irrational when appearing simultaneously" (Lewis, 2000). In this

endeavor, we also made sure to distinguish paradox from dilemmas, which require a difficult choice between competing alternatives that each have advantages and disadvantages, but that can be resolved temporarily by integrating contradictory elements (Clegg and Cunha, 2017). Dilemmas become paradoxical only when options are contradictory and interrelated such that any choice between them is temporary and tension will resurface (Smith and Lewis, 2011). After a first run through the data to reveal paradoxical tensions, we then went back to the data and conducted the first level of coding by analyzing the data to identify and code core themes with the intention to identify discrete types of paradox. This analysis generated six main categories. Going back and forth between data and literature, we compared our findings with the literature to identify and classify similarities and differences (Eisenhardt, 1989; Eisenhardt and Graebner, 2007).

The overall data analysis was run by two researchers independently who, in case of unclarity or conflicting categorization of information between both researchers, consulted a third researcher who acted as a neutral "judge" to ensure a high level of objectivity. In addition to that, within the data analysis process, all coders were also screening for examples of compassion which leader and member (dyad) referred to similarly. This allowed us to directly compare (1) the behavior of leader and member in a given situation, (2) their perception of provided and received compassion, as well as (3) the shared views or expectations in the exact same situation. Our dyadic research approach therefore enabled us to analyze the two sides of most situations which were described during the interviews.

4. Results

"[...] suffering is anything that describes a deviation from the norm that pulls me down personally and/or negatively affects me, in every respect. Suffering among my employees can be manifold. The classic is suffering at work caused by the job, but also suffering at work can be caused by a private situation, and suffering can be caused by a private situation. [...] But I think I have less to do with the latter now, because there is relatively little I can do about it. What I can control are all the sufferings that ultimately condition the work or influence the work" (L06).

As this leader eloquently shares, suffering can spring from many sources, and impact – or not – the workplace. This reality is creating a tension between what belongs to the private and what belongs to the professional life. Indeed, our interviewees often pointed out the line between private and professional being blurred:

"if something is really completely in the personal space, you might want to separate it[...]. That could include if there's anything going on with my girlfriend. That's something I would tend to keep private. But I think the line is rather a bit blurred. So, if my grandmother were to die now [...] that would certainly also be emotional, personal and intimate suffering. And I would probably share that anyway, at least to the extent that I want to communicate it so that others can better classify my situation – and thus also with my supervisor" (M02).

Not surprisingly, in our sample, our interviewees raised the point that the boundary varies from one person to the next. One leader for example states that some people “are also very conservative and do not really want to reveal anything about themselves” (L02), while others state very clearly that compassionate leadership means for them that they are also able and allowed to share private information (M03).

As stated by L06, people will bring suffering from home to work (but also vice versa), and the line between private and professional becomes blurred. According to our analysis, expressing and responding to this suffering in the workplace leads to six paradoxical tensions (see Table 1). Interestingly, even though we did not deliberately look for paradoxical tensions for each step of the Interpersonal Compassion Process, 5 out of those 6 can be mapped to that process, while the last one relates to the leader-member relationship. The Table 1 provides an overview of those categories, and how they map to this process.

In the following sub-sections, we will present those paradoxical tensions and illustrate them with quotes from our interviews. Each quote is labeled to a particular interviewee, with “M” indicating a “member,” “L” indicating a “leader,” and the subsequent number representing the corresponding dyad. Finally, we will also present our findings relevant to another paradox of strategic versus selfless compassion that Araújo et al. (2019) identified.

4.1. Paradox #1: showing the vulnerable private self versus showing the strong professional self

When suffering, the employees we interviewed often mentioned a paradoxical dilemma they face when deciding if they should express their suffering or not, especially in the context of the hierarchical relationship with their supervisor. One of them explains:

TABLE 1 Analysis categories: identified paradoxes mapped to the interpersonal compassion process.

Interpersonal process of compassion (Dutton et al., 2014)	Paradoxes identified in our study
A sufferer’s experienced and expressed suffering	Paradox of showing the vulnerable, private self versus showing the strong, professional self
A focal actor noticing suffering	Paradox of probing (pro-)actively but respecting boundaries
A focal actor feeling empathic concern	Paradox of compassion requiring empathy and understanding, yet leaders need to show discernment so as not to be exploited or manipulated
A focal actor and sufferer engaging in sensemaking	
A focal actor acting compassionately	Paradox of the imperative for compassion to answer one person’s suffering versus the imperative for equality and fairness to other team members
	Paradox of weakness versus courage
Non applicable	Paradox of the impact on the leader- member relationship: distance (hierarchy) versus closeness (interpersonal bonds)

“it’s always a bit of a balancing act: To what extent do I show myself vulnerable or somehow sensitive, weak? To what extent do I allow a person who is superior to me and who, if necessary, can and may also make decisions about my further professional future, to have insight into how I am doing emotionally or what any of my problems are. Of course, this is always a matter of consideration” (M04).

The desire to show a strong professional self is linked to the concept of impression management, defined as the process by which people control the impressions others form of them (Leary and Kowalski, 1990). On the other hand, showing vulnerability implies deliberately disclosing sensible, potentially damaging information (Nienaber et al., 2015). In the context of suffering and compassion, while followers expect a certain level of compassionate leadership behavior, they need to first express that suffering, requiring them to show their vulnerable private self and (potentially) eroding their strong professional self, which they think they need to retain their jobs and not create additional suffering (immediately or in the future).

One of the leaders interviewed displayed a good understanding of how vulnerable employees can feel when sharing their suffering:

“And if the other person smashes you or shows no understanding, then I imagine it like a snail that just gets out of the shell and at that moment pulls itself back into the house very, very quickly, and then getting out again is relatively difficult” (L06).

The need to control the impression others form of them led some of the members interviewed to carefully consider which suffering they would share or not to not be perceived too weak for a current or prospective job:

“If there are any psychological problems now, I would perhaps also be cautious, because regardless of the corporate culture, I believe psychological suffering can also be taken up as excessive demands and also weakness and as a lack of qualifications for the job. I’d probably really hold back on that. [...] All suffering that goes in the direction of being overwhelmed at work and also being overwhelmed by a lack of qualifications - I would consider whether I share it that way” (M03).

“At the moment when one reveals private problems or personal problems that may now have to do not only with work processes, but with personal feelings or circumstances, one naturally makes oneself vulnerable, which of course in the case of [...] a promotion [...], this can make you look weaker than someone else possibly” (M04).

Our interviewees also point out the risk that being vulnerable and sharing their suffering might impact how performance is reviewed – positively or negatively, consciously or unconsciously:

“When it comes to performance reviews, a leader with compassion and with different relationships with employees no longer evaluates 100% objectively” (M03).

“To be honest, I believe that if something like this happens too often, that at some point you can also assess the person a little less. So, I think it can change perception” (M05).

One leader also recognizes that performance evaluation can be a challenging exercise, indicating that it can be difficult to

compartmentalize and disregard some sensitive topics they are aware of and that are affecting their employees' performance.

"You have to differentiate very strongly between the classic performance that you have to evaluate as a supervisor and you have to differentiate that from possible compassion, problems or whatever kind of thing you have knowledge of. Because you are responsible for evaluating performance purely from the job description. Quite simply, it becomes clear when an employee is sick and can only work three days a week. Then I'm only allowed to evaluate these three days and I'm not allowed to evaluate the 5 days where I say, 'He's not there for 2 days.' And that's ultimately how it is with the topic. If I am aware of a topic that has been openly brought to my attention, then I must hide it in the classic evaluation, but I have to evaluate the pure work performance. This is sometimes difficult" (L03).

Interestingly, our interviews indicated that the coin can be flipped, and strength can be experienced when sharing vulnerability.

"And that was a very concrete example, where the feedback came that this person had been thinking about this vulnerability or this supposed weakness to talk, but then to make it known, and that then helped the person extremely to draw strength, because she did not have to hide it, but was able to deal with it openly towards me" (L03).

In addition, the experience of compassion has been indicated by an employee as a way to go past their fear of being vulnerable, thereby creating a virtuous circle:

"I think through the compassionate behavior of my leader, I am encouraged to communicate better and share more. And because of that, there are fewer situations where you are just dissatisfied, but you do not change anything about it, because you do not even get to share it because you think: 'Well, I'd rather not say anything, because that could be used against me or be interpreted negatively" (M04).

4.2. Paradox #2: probing actively while respecting (individual and unclear) boundaries

"To what extent can I impose myself as a managing director and as a boss? [...] How far can I get involved or try to penetrate the emotional world of the other person? How far am I allowed to do this? I think you must hold back and think carefully about when you can hook in and when you cannot. And ultimately, I believe that compassionate leadership is right at the moment when you turn the offer into a conversation. And if that is accepted, then you can devote yourself to it. But if that is not accepted, the offer, then it is actually none of my business, that is a private story" (L04).

Most of the employees we interviewed insisted on the fact that they expect their leaders to ask and probe when they notice their

suffering, especially as sometimes it can be easier for them to continue a conversation about their suffering initiated by their leader rather than start one. Also, they expect their leaders to observe and intervene if necessary:

"And then, if necessary, to ask back. Or at some point, for example, in a different professional context, when my boss also notices that things were not going well or maybe he noticed that I was somehow different than usual. Then maybe ask 'what is it?'" (M01).

This perception is mostly aligned with the leaders we interviewed, but they place an equally important responsibility on the employee to share (or not), as illustrated by those leaders:

"[Being] compassionate is to perceive [suffering], that's the first thing. The fact that you perceive: 'Okay, something seems to be wrong.' and then also as a manager to have an ear there, sometimes to ask a question, just to listen [...]. And then it is also up to the respective employee himself to decide how deeply and what he actually gives of himself" (L03).

"And you also make a comment: 'Ah, you are not in such a good mood today.' And then you usually observe: What is the reaction of the person? And either the one goes into the conversation [...] or he does not say anything. But I'm not one to drill now. So, people have to reveal themselves" (L01).

The example above hints at the concern to invade too much the space of their members (or their "emotional world" as stated by L04 as the start of this sub-section). Because the nature and experience of suffering is so individual, most of the leaders we interviewed tend to take a more cautionary approach and prefer to leave it to their employee's initiative to initiate a conversation. As illustrated in the example below, in some cases leaders can also feel a tension between listening and asking for more details:

"There are limits where employees are more likely to want to keep the private private and he also kept private for a while. But only when it became so big and had so much influence on professional life, only then has he communicated it to his supervisor, although we also have this buddy relationship. Nevertheless, he wanted to keep it more private. I think that also shows that there are definitely limits and I respected that to a certain extent, that he does not want to talk too much about it and I have not asked for every single detail – there is definitely a limit" (L02).

One leader in particular also feared that if they would probe too much – even if guided by the desire to help their employee – they might be perceived as abusive in their position of hierarchical superior:

"If I become abusive and interfere in very special, private problems or create pressure or ask: 'Now come, now tell me about it, I notice it very clearly.' [...] The danger is definitely there that you get too close to people. So not as a leader, but that you just bring the aura into the aura that everyone considers their privacy. I think indiscreet behavior is multi-layered, annoying and also disrespectful and as such it can also be understood as a lack of respect or as arrogance" (L04).

To manage this tension between the expectation to notice the suffering and ask about it without invading the privacy of their members, one leader uses his value of respect as a North Star: “[You] need to have a clear respect for the individual – when someone signals that they do not want to go one step further, to accept that” (L03).

4.3. Paradox #3: empathetic and understanding versus discerning

In general, [...] if you are always helping, you are fostering a little bit of a “me-me-me” mentality and like this: “Oh, [...] If I feel like it, then I’ll tell him how bad I’m doing and then he’ll give it to someone else.” There’s a fine line, I think – depending on how well you can work with your people – between “I’ll help you because you need it” and “I’ll let you take advantage of me because you do not feel like doing anything” or generally just say: “Man, I’ll tell you how bad my weekend was and with my dead grandma he’ll somehow cover my projects for me this week.” [...] That’s why I think the chance of being exploited is immense (L06).

As this leader pointed out, our interviews revealed that some leaders feel a clear tension between being and showing understanding towards their members who need help, while applying enough discernment to avoid being exploited by those who might be tempted to take advantage of a leader’s compassionate attitude. This paradoxical tension is also reflected in our interviews with the members who express their clear expectation toward leaders to be empathetic and understanding, while recognizing that same risk of exploitation and manipulation.

Indeed, on one hand, employees in our sample expect their leaders to take them seriously and feel their suffering. As a matter of fact, all members interviewed define compassionate leadership as their leader showing a deep understanding and empathy for their issues and suffering. They expect their leaders to put themselves in their shoes and show a genuine interest for them, sometimes even to show forgiveness for a temporary dip in motivation or performance. Even when there is no obvious solution to solve their problem or alleviate their suffering, the minimum they want is to be heard and seen:

“What I would always expect is at least to get the feeling of being taken seriously. There does not always have to be a solution to everything, but I want to have the feeling that I can express my problems without her saying “But that’s not so bad,” or “just pull yourself together” [...]. Because at the moment when I see this as a problem and go so far as to communicate it, I expect my counterpart to take it seriously. As I said, there is not always an immediate solution for everything, or possibilities to implement this as one would like to wish or hope for. But I always expect that at least this will be taken seriously” (M04).

This member goes further and shares an example when they felt they were not taken seriously when they shared that they were overwhelmed with the amount of work they had:

“I was actually flattened that it was dismissed that way and that’s this certain situation, where in retrospect a lot of things come up

and in the second you are so surprised. It’s also unpleasant to admit something like that you cannot do it anymore. But the fact that it is then made so small, so to speak, and really wiped away, I was really overwhelmed to address it further, because I was simply irritated, I have to admit. [...] So, you can always wipe away a lot of such problems. That’s the feeling I had rather. In this respect, I did not have the impression that he had really acknowledged this” (M04).

At the same time, while employees want to be taken seriously, they also recognize that their leaders’ compassion could be exploited:

“It can also be exploited if a leader is too compassionate. If people say: “I’m not feeling so well today” and the manager says: “Yes, then you close the computer and lie down” – of course, this can also be exploited if someone says: “I do not feel like working today. I’ll say I’m sick,” or something. [...] It can also be that there are people in the team who say: “Oh, our boss, he’s very compassionate. I’m sure he’ll understand if I have to visit my mother now because I have not seen her for 2 years since the lockdown.” And in the middle of the most stressful phase of the campaign (...) So I think this exploitation is an issue” (M06).

4.4. Paradox #4: imperative for compassion towards one sufferer versus the imperative for equality and fairness toward the rest of the team

Within their Paradoxical Leadership Behavior (PLB) framework, Zhang et al. (2015) define the paradox for leaders of “treating subordinates uniformly while allowing individualizations.” This paradox refers to the challenge for leaders of providing their members with “identical privileges, rights, and status without displaying favoritism” (p. 542), while ensuring members are not depersonalized or deprived of their unique identity. In the frame of compassion, actions to alleviate suffering might create a temporary situation where members benefit from different privileges and rights. When addressing the suffering of one of their team members, the leaders we interviewed pointed out the difficulties in answering the needs of this person in a tailored manner and alleviating them while ensuring equality and fairness with the rest of the team. On one hand, providing an individualized response was often perceived by our interviewees as necessary to alleviate the suffering of the sufferer. On the other hand, they also defined equality as being fairly treated, not seeing favoritism behaviors, and as everybody having the equal chance to receive compassion from their leaders. This paradox also resonates with 2 organizational compassion paradoxes proposed by Simpson and Berti (2020): *Accept unfairness* versus *promotes fairness*, and *unjust* versus *just*. For the former, the scholars base their paradox on the research of Thompson (2007) and Du Gay (2008) who argue that compassionate administration is an arbitrary and unfair expression of favoritism. For the latter, they base their paradox on the research by Batson et al. (1995) indicating that compassion leads to decisions that conflict with justice.

Some of our interviewees recognize the risk of perceived favoritism, which can create tensions within a team:

“This can also have the effect of saying, ‘The boss prefers someone.’ You feel unfairly treated. Of course, this can be the case – especially when a new employee comes along and sees: ‘They already have a long-standing working relationship. Would I get so much sympathy from the boss if I said my dog was sick now?’” (M06).

“It’s also a bit of a question: How much compassion do you show to whom? So as soon as you do not show everyone the same amount of compassion, because you may like some better than others – happens as a leader sometimes – then of course you quickly have such a favorite that people say: ‘Man, [...] she’s his darling anyway, she can do whatever she wants; cough, then you can stay at home for 2 weeks. And then it’s all up to us again’” (L06).

Some recognize that the quality of the relationship between a leader and a member might influence the level of compassion displayed:

“The question is: are all employees shown the same amount of compassion? This is not always the case. Some more than others, depending on how far the personal relationship between the supervisor and the employee is. [...] So, inequality arise and also the feeling that in the worst case some people do not take advantage of it now, but they constantly need this compassion, so to speak, because something is constantly not working, where you can ask yourself: Why is it always the case with you that something in your life does not work, and then you always have to bring it with you to work?” (M05).

In some cases, when leaders have to deal with confidential information, it can be even more difficult to ensure that the rest of the team does not see any favor treatment:

“There was a person who had a case of cancer in the family [...] and not everyone in the team should know. And of course, the team should not think that the person is now favored when he or she may not have to perform or do quite as much as the others” (L05).

In other cases, a respondent suggested that the inequality might simply arise from the fact that people would tend to describe their suffering differently, thereby leading to different solutions to address that suffering:

“The disadvantage may be that employees feel treated unequally with each other with the solutions that are presented [...] which may actually depend on how the respective person describes their problem or possibly even comes up with suggestions for solutions [themselves]. But that there might be an imbalance and people feel disadvantaged” (M04).

Even when the rest of the team is fully behind the actions of the leader to alleviate the suffering of another team member, it can create a feeling of inequality, especially as often the rest of the team needs to work harder to support that person. A leader comments:

“On the other hand, the number of projects is not decreasing. But if you have two hands less, you have to ask your other people to do more – and of course beyond their regular working hours – and to do so with pleasure” (L06).

Another interesting micro-discourse from a team member goes in a similar direction, highlighting the contradictory feelings that this paradox can evoke, starting with envy towards the sufferer followed by guilt as a secondary emotion, while suffering themselves from the consequences of the solutions and the perceived unfairness:

“I know a colleague who has gone through some crisis every week, with his relationships and family, and which I also find quite terrible. But that was really a big burden for the team. I know how the conversations took place between my boss and the person. But for a short time, I thought to myself [...]: We would all like to have so much freedom from time to time, just not to work, not to finish a project after all, because you just get more time. And that was also at the expense of other employees, who then had to finish it on top, or who always had to argue why things are not there, which is not always pleasant. So once is not once, but from the fifth, sixth time it just gets difficult at some point” (M05).

In this case, the member goes further in describing the felt unfairness due to the fact that the attention of their leader was only directed to a few people and who consequently felt left aside:

“I was just unlucky. Well, I think so, maybe I had just insinuated that I get along well with everyone anyway. That’s why I do not have any problems at all. And other colleagues who were not as powerful were more likely to get this help because they thought: ‘Oh, they are not quite as stable,’ so you have to look at them. [...] So, it felt very unfair to me because every employee was now given very personal advice, but I had the feeling that there were just a few that were overlooked. Some because you say: ‘Oh, they are not that important anyway.’ Some where you say: ‘Yes, they can do it on their own anyway.’ (...) I did not think that was fair or balanced” (M05).

Interestingly, the corresponding leader in this situation seemed oblivious to the fact that some of his team members felt overlooked in this situation:

“Of course, I do not differentiate in such a way that it appears that I prefer someone. Rather, the employees then see that everyone has the same amount of attention, communication, or time together in the one-on-ones. Or we have time together. So, you should definitely not have favorite employees” (L05).

According to our interviews, this tension is exacerbated by the fact that suffering is very individual and subjective. Therefore by default, not everybody would have the same threshold, or feel the same amount of suffering in comparable situations.

“Everyone defines suffering differently for themselves. One of them may have grown up with the hamster and the other says: ‘Yes okay, my grandma died, but I’m not going to act like that now, I’m pulling myself together now.’ It’s totally different, but at that moment both are equally bad for the respective person” (M06).

This also led the leaders to doing some sensemaking to try and preserve equality in the team, and to accommodate for the fact that different employees might communicate differently and suffer differently:

“And there is always so much talk about Generation Z, that they are so demanding. And if they do not like something, they complain right away. And they are so idealistic. I think you have to differentiate again, whether employees sometimes go through stressful phases, they should also consciously. And some things they just have to swallow. That’s how I would look at it” (L02).

To resolve that tension, some explain that it is important to refocus the group and take a perspective:

“And it cannot be that someone thinks: “Okay, he has advantages” by showing compassion and being a little closer to the person, that the others think I prefer him. So, this must not happen, but it must remain in a context where everyone sees: Okay, it is now about the situation and not about the compassion in the context of a favor, but to help the person in the moment” (L01).

4.5. Paradox #5: compassion leader behavior as a sign of weakness or requiring courage

Sadly, leaders in our interviews shared that in their organization their compassion is often perceived as weakness by top management, which can sometimes even stand in the way of career advancement.

“I have more of a problem in the other direction that I’m too soft. My superiors tell me: “You’ll only become a real manager once you fire your first employee. [...] there is definitely a risk that [...] I will not be seen as a hard manager who can also enforce things” (L02).

This tension with upper management is also quite clear for some members, who describe the challenges leaders face when they act in a compassionate manner:

“It comes across as weakness for some – not perhaps for the people in the team, but just one level higher – if compassion is shown, that it may be counted as a sign of weakness [...]. I’ve experienced that too. [My supervisor] is very compassionate. In the upper tiers it is already thin. There is often little understanding or [...] no proactive questioning: “How are your teams doing?” And in case of doubt, you are also quickly there with termination agreements” (M06).

Those results align with the “Sign of weakness versus Requires courage” paradox that [Simpson and Berti \(2020\)](#) identify as part of their proposed organizational compassion paradoxes. They base this proposal on the research of [Koerner \(2014\)](#) stating that “for the giver of compassion in organizational settings, courage is typically associated with relational power imbalances, manifesting in actions that threaten relationships with more powerful individuals” (p. 444).

This lack of alignment on values with the organization can create a lot of frustrations for leaders who are trying to alleviate the suffering of their employees out of altruism but also with the intention to maintain the performance level of the organization. Sometimes, the frustration is made even bigger by the fact that the organization is

sending a message feigning compassion but that, in action, leaders are often left alone.

“In general, an employer does not make it easy for you to release an employee, to create freedom for him – for this, generally large companies are not created. They do not really want flexibility, but actually a large company wants to know at all times where the employee is, what he is doing and why he is doing it. The more you demand from the employer [...] the more difficult it will be in the end. You often get very, very frustrated – and that would be the second emotion – because you hit a wall again or it did not go any further. [...]. You feign a lot of compassion, you have that in your corporate targets, you have it anchored in your values [...] But I do not think most big companies live that. And you realize relatively quickly, as soon as you want to take advantage of a value like this and need help, the fun is over relatively quickly. It’s always about performance, business, topics, goals, KPIs – that’s upheld. Most companies are compassionate as long as it does not affect their KPIs. I do not think any company would put an employee above its own corporate goals” (L06).

Other leaders agree that it is unrealistic that a company would put an employee above its corporate goals and call for a balanced approach in order to “understand the goals of the employee when there is a conflict of goals, and try to resolve it in communication, that you bring both company goals and employee goals into harmony” (L05). To solve that tension, some of the leaders we interviewed are calling to transcend that paradox and really bring compassion as a core value in organizations.

“I am also a company representative and have to make sure that the performance of the company is as it should be; that the pace we need is maintained and that the topics that are relevant to us in business are driven forward. The more suffering my employees have and the more aches and pains, the less they will be able to maintain this pace, the less they will be able to maintain the standard, the less the quality will correspond to what everyone imagines. That’s why compassion must also play a role from a company’s point of view, otherwise you burn people and you do not get your topics on the street. And then, you can see it in KPIs and sales figures. Then you shoot yourself in the foot. In the short term this may work, but in the long term/medium term, I do not think it works” (L06).

4.6. Paradox #6: impact on leader–member relationship: distance (hierarchy) versus closeness (interpersonal connection)

The blurred line between professional and private life induced by suffering and compassion in the workplace also impacted the relationship between the leaders and members we interviewed. The experience of compassion tended to bring leaders and members “closer,” leading them to question how close is appropriate. [Zhang et al. \(2015\)](#) identified a similar paradox in their conceptualization of paradoxical leadership and argue that leaders are challenged by the need to maintain distance – through vertical structural relationships

and differentiation in status, rank, authority and powers – while simultaneously forming interpersonal bonds (and therefore minimizing status distinctions).

One leader interviewed recognized clearly that addressing the suffering of employees in the workplace and taking an interest in their emotions and distress can create a tension for other leaders who would rather remain in the role of the distant and aloof superior:

“[Showing compassion to employees brings] flatter hierarchies automatically. [...] I also know other bosses who are very concerned about hierarchies. They would certainly also perceive that they consciously build up a distance and do not want to hear the personal issues not to let this closeness arise since it comes with a responsibility that you may have to take on, but this is additionally burdensome” (L04).

Even the leaders we interviewed who were convinced by the benefits of compassion at work recognized that there were some risks in getting too close to their members, including a risk of losing respect or authority.

“When a problem arises, [...] you also give the employees the space to become abusive towards me and then the necessary respect – not because of my age or position, but simply because of the company structure and the fact that there are always decision-makers, you take very much out of me and sometimes cross a border” (L04). “The limit is really reached when I no longer have authority and the employees no longer do what I want. But at the end, the employee has to do what I want. He is welcome to give me input and share his opinion, but if I then say: “No, we’ll do it this way now,” then that has to happen. And I think if I do not have the authority anymore that he does not do it, that would be a limit where it becomes difficult” (L02).

Going beyond the concept of Zhang et al. (2015), our findings also outlined the experience of the member. Interestingly, some members also identified clear risks associated with a close relationship with their leaders, including the fact that it can make difficult conversations even harder to conduct.

“Everything that has to do with my direct job and also with success is absolutely appropriate to be interested in it as a boss. And showing interest in personal matters is great, also appropriate, but there you must not forget: You still have to keep your professional distance. You cannot think of your colleagues or your boss as your closest friend. Of course, it can happen that you build it up outside the office, but in the end it’s still about the success of the company. And if you build up a personal relationship, they might be setbacks. And my boss once gave an example that he had to decide on a person he had to dismiss. He also told me that he was sleepless in bed because it was extremely difficult” (M03).

Another interesting micro-discourse illustrates well the tightrope members walk between the necessary distance and desired closeness with their leader, and how it could impact the work result:

“At some point you fall too far out of this professional context. When you realize you have a great relationship of trust there, that you may

no longer have only through this professional relationship, but at some point it will go into your private life in a certain form [...] and then I could imagine that the boundaries will become blurred [...]. My boss is totally empathetic, helpful, courteous – yes, these are actually exactly the qualities I expect from this compassion – then I think to myself: “Oh yes, actually we get along well and should meet sometimes.” Then maybe there are some discrepancies [...]. And then, of course, it reflects one-to-one on the professional relationship and I think then you can often misinterpret topics, or interpret too much into them. And of course, this can also worsen a work result” (M01).

They add on, commenting on how closeness can bring confusion in terms of hierarchy levels, as well as difficulties to engage in difficult conversations such as salary negotiations.

“I think then it would just be too much of a friendly relationship for me. And in a friendly relationship, I think, you are still on one level, but in a professional situation, my manager is of course superior to me. I think, it’s just difficult – also from a communication perspective – that you still maintain this. He (leader) is actually above you, but actually behaves like me on one level, but there are also various topics where this superordinate and subordinate is absolutely relevant. For example, when I’m talking about salary negotiations and I just find it difficult, if you are too much on this friendly basis [...]. I think, it’s very difficult to discuss with your management, at a serious, constructive level” (M01).

4.7. Strategic versus selfless compassion: a theoretical paradox?

Within their research, Araújo et al. (2019) emphasized paradoxical tensions between compassionate motives that are selfless and strategic. They define selfless compassion as springing from internal ethical virtues or conscience, whereas strategic compassion describes the value or organizational compassion as a contributor to enhanced organizational performance, productivity, and profitability. Within our study, we also found evidence for those two motivations existing simultaneously in the leaders we interviewed. Indeed, on one hand leaders mentioned that they are driven by ideals of humanistic values, personal determination, and prior experience in one’s own personal and professional environment regarding suffering. Acts of selflessness appeared especially in situations where suffering occurred in a very personal context of the member, such as the illness of children, indications of burnout, or very strong and deep relations and commitment to the team/team members. For instance, one of the leaders provides an example:

“I took away one topic completely [from the member] during the time when the children [of the member] were ill, and I simply said: “Watch out - if anything happens, be it a child suffering, you have to go to the doctor” [...] then I simply jump in. We do a short update beforehand [...] get me on board, I go to meetings, I take over certain activities in the meantime, we do a short handover afterward” (L06).

This leader also adds that “compassion is important and it’s a given.” Interestingly, his member confirms the statements and the selflessness of his leader by extending the scope of incidents:

“For example, if the child is sick, then he says: You take care of the child. If I have too much work, then he says: “Give something, tell me what, and I’ll take care of it.” Or [...] when he notices that we have been working so late again in the evening, he says: “On Friday, we finish work at two o’clock” (M06).

This example shows that the act of selflessness is recognized and is not intentionally expected but appreciated by the member.

At the same time, leaders in our interviews outlined that they also behave compassionately towards their members for strategic reasons, noting an increase in member performance, productivity, motivation, job satisfaction, commitment, and retention to the company. For instance, some leaders stress the link between compassion and performance:

“Compassion is definitely an issue that is important because it ultimately increases employee performance and satisfaction. [...] I think satisfaction is important for employee retention. Thus, I would always say: show compassion, be empathetic. That increases employee satisfaction and performance. And that’s also measured in our company” (L02).

“It’s simply performance enhancement. I really mean it. An employee who feels comfortable, who feels understood, even sometimes in other situations will perform three times better than an employee who does not feel understood” (L03).

In most of our six dyads, leaders highlight the strategic impetus of their compassionate behavior but often also link it to personal reasons/motivations. For example, one leader explains his compassionate behavior from a strategic and personal perspective:

“That is multi-layered. I am also quite honest about that. On the one hand, I’m a very pragmatic person: My task is to ensure that work performance is maintained. On the other hand, because I have been through a lot, through a relatively early death of my father, when I was 15 [...]. In my time, a lot has happened in my immediate environment and a lot has happened to me - I have a lot behind me. I think that’s when you become sensitive to something like that” (L04).

I want to actively do something about it, because it is important to me personally. [...] I want to change something about it because I care about it for my team and for the success of the company (L06).

One of the most striking outcomes in our study revealed all six members interviewed are aware their corresponding leaders show compassionate behavior rather due to strategic motives than pure selflessness. This underlines the fact that employees in our study are evaluating the compassionate behavior of their leaders critically and that they are aware of the primarily non-altruistic behavior of their leaders when it comes to alleviating their suffering. For most of the members interviewed, this compassionate leadership behavior is acceptable. Regardless of the motive behind the compassion, what they eventually expect is for their suffering to be noticed, responded to, empathized with, and appraised accordingly both at the workplace

and partially in personal terms when it has an impact on the work performance of the member.

“Of course, you can say that this is simply altruism. At the same time, I’m also sure that this increases team performance because suffering employees are not performant employees. And, of course, the bond with the employer. When I feel in good hands. So, when things get tight, when I know: Okay, my employer will take care of it at this point, is helpful. Then maybe I’ll stay longer with my employer” (M05).

Other members confirm the strategic intentions of their leaders and attribute it to an organizational and team point of view:

“I believe that there are always financial considerations involved because otherwise, an employee who is really in a crisis will effectively leave. [...]. It is perhaps not only a problem for the employee himself [...], but also for the whole team, because an employee who is in a crisis also influences the team” (M05).

Finally, some members raise the positive effects of their leader’s compassionate behavior for the organization but also for themselves, even if strategic motives cause it:

“I think that’s also very important in terms of performance. If you feel good, you work more productively. Then it’s also very important when it comes to proactive problem solving: If you show compassion, you also work more transparently, you address problems more readily. In the end, it’s also more beneficial for the company, that’s for sure” (M03).

In addition, our findings add a different facet to the “strategic” motive of compassion. Indeed, our interviewees revealed that the strategic decision to show compassion can be self-serving. Effectively, beyond increasing organizational performance, some leaders indicated that acting to alleviate the suffering of their employees can be necessary for their own image and reputation in the organization, to ensure their own personal success as manager.

“Above all, it is usually the case that what others may perceive as suffering is relatively easy for you to solve – in 80 percent of the cases it is just somehow a snap of your fingers, it does not hurt you. And in the end, it always pays off. So, let us put it selfishly: Showing compassion as a boss always pays off in the end [...] the topic of loyalty or motivation is of course what you want to buy as a boss” (L06).

Interestingly, even this self-serving dimension of advancing the leaders’ goals is apparent for some members as well:

“Ultimately, happy employees are also just effective employees. So, also believe that it is in his (leader) interest if I suffer less, and presumably also work better. Ultimately, he also wants his team to advance his goals” (M01).

Some members also refer to a feeling of indebtedness towards their leaders that pushes them to do a good job in return of their leader’s compassionate behavior:

“If he shows compassion, she will also hope that I will be open to him and that I will not come up with any excuses in any form for any topics and then perhaps feel obliged in a different way, because I also know he will also respond to me. Then I also make sure that I do a good job during the time when I’m there” (M06).

Therefore, our results first indicate that leaders in our study could be driven to behave compassionately (or not) in the workplace due to a leadership strategy to guarantee results. The recognition and full acceptance of this reality by members in our sample indicates a mutual understanding that compassion within the relation between leader and member does not need to follow pure selfless motives to alleviate the prevailing suffering. From our interviews, it seems that leaders need to balance 3 areas: serving up (upper management, company goals), serving others (members, often out of altruistic, humanistic motives), and serving oneself (maintaining position through results, career development), and that those 3 areas might have an influence on the decision to act in a compassionate manner. However, we did not find evidence that any of our interviewees felt a paradoxical tension emerging from those opposing motives behind compassionate behavior. Instead, most of them rather presented those different motives as the different sides of a coin or as different facets of their motivation. They often referred first to their personality and values, giving them a certain sensitivity to others’ suffering and triggering an emotional motivation to act to alleviate that suffering, then they added the more rational and strategic reasons that legitimize a response in the workplace context. Therefore, even though those various motivations might be theoretically paradoxical, the actual presence of a paradoxical tension as defined by [Smith and Lewis \(2011\)](#) is ambiguous in our data. For this reason, we did not include this dimension as a paradox that leaders and members face when leaders demonstrate compassionate behavior in the workplace.

5. Discussion

5.1. Critical discussion of key findings

5.1.1. Compassion paradoxes induced by compassionate leader behavior

The findings of our study indicate that compassionate leader behavior goes hand-in-hand with paradoxical situations that both leader and member face in the workplace, supporting the proposition that compassion as a social, interpersonal process is complex and multi-faceted. Whereas one could think that compassion is a straightforward act, our study shows that it brings many considerations for both leaders and members.

Our analysis has identified 6 compassion paradoxes that spring from compassion from a leader towards a member. Little research so far has shown interest in the perspective of the receiver of compassion. This has recently been criticized by researchers (see for example [Simpson et al., 2014a,b](#)) who called for further attention to the receiver’s experience. In our analysis, 1 out of 6 paradoxes is faced by the member/receiver, 4 out of 6 are faced by the leader/ giver, and 1 is faced by both. To our knowledge, some paradoxes are new and have not yet been explored in literature. Some paradoxes have been recently explored by other researchers and our study builds on them (for example [Zhang et al., 2015](#); [Simpson and Berti, 2020](#)). Therefore, our

study contributes to a growing body of literature studying the intersection between compassion and paradoxes, while giving a voice to both leaders and members.

5.1.2. The impact of social hierarchy on compassion paradoxes

Hierarchy is a defining and pervasive feature of organizations ([Magee and Galinsky, 2008](#)). Our study differentiates from other research of compassion paradoxes in the sense that it also focuses on the interplay between leader and member. From that perspective, the findings of our study indicate that social hierarchy is playing a crucial role and exacerbating some paradoxical tensions. In particular, we argue that social hierarchy plays an important role in 4 out of the 6 paradoxes identified.

5.1.2.1. Showing the vulnerable, private self versus showing the strong professional self when expressing suffering

Our findings have shown that members sometimes face a difficult decision when considering sharing their suffering or not. Indeed, the person who is the most able to offer them a solution to respond to their suffering is also the person who is evaluating their performance and making, or at least facilitating, career decisions. In that sense, members can feel that their leaders have “power-over” them ([Göhler, 2013](#)), meaning that they have the capacity to enforce their will over others. This accentuates the fear of being perceived as vulnerable, weak, too demanding, incapable, thereby impacting the decision of expressing suffering. Once compassion has been received, this can also lead members to feel indebted toward their leaders and that they need to work harder to compensate ([Clark, 1987, 1998](#); [Clegg, 1989](#); [Schmitt and Clark, 2006](#); [Simpson et al., 2014b](#)). Even though our study has not shown evidence of leaders consciously manipulating their members into such position, research has shown that givers of compassion might unconsciously engender a sense of diminished agency as dependency, obligation, indebtedness, and even emotional enslavement ([Szasz, 1994](#); [Stirrat and Henkel, 1997](#); [Simpson and Berti, 2020](#)).

5.1.2.2. The imperative for compassion and an individualized response to suffering versus the imperative for fairness and equality

Providing an individualized response to a suffering member might bring a sense of unfairness ([Thompson, 2007](#); [Du Gay, 2008](#)), injustice ([Batson et al., 1995](#)), and an overall challenge for leaders to provide all members with “identical privileges, rights, and status without displaying favoritism” ([Zhang et al., 2015](#), p. 542), while ensuring members are not depersonalized or deprived of their unique identity. Indeed, in the frame of compassion, actions to alleviate suffering might create a temporary situation where members benefit from different privileges and rights. In a sense, we could argue that when practicing compassion, leaders might choose equity over equality. The decision for equity, however, might conflict with the expectations of team members. Scholars have hypothesized that organizational culture would determine which distribution principle (equity, equality, or need) group members would use to allocate resources ([Mannix et al., 1995](#)). Other scholars have shown that conflicts can stem from equality violations and result in nondirected conflict that is symptomatic of decreased social cohesiveness ([Kabanoff, 1991](#)).

5.1.2.3. Compassion as a sign of weakness versus requiring courage

Our findings indicate that leaders find themselves sandwiched between their employees and their own managers, sometimes including different sets of expectations. Although previous research indicates that compassion is a quality of leaders that leads to a higher perceived leadership competency and to being acknowledged as a successful leader (Kellett et al., 2002; Mahsud et al., 2010; Melwani et al., 2012), some of the leaders participating in this study fear the opposite. Indeed, they are themselves embedded in a web of hierarchy and need to constantly watch out to maintain their status in the organization. This status is naturally deeply influenced by the organizational context since compassion is shaped not only by personal and relational contexts, but also through norms and values exhibited at the organizational level (Dutton et al., 2014; Kanov et al., 2017; Yoon, 2017). The attitudes of managers in our interviews are particularly criticized in such contexts, leading to some participants fearing their compassionate behavior might impact their career development. This represents the dimension of courage, which is associated with relational power imbalances, manifesting in actions that threaten relationships with more powerful individuals (Koerner, 2014; Simpson and Berti, 2020). Worse, sometimes the leaders in our sample found themselves stuck between two narratives: the official narrative of the organization who claims to be human-centric and compassionate, and the unofficial narrative that showing compassion and vulnerability equal weakness. This echoes Simpson and Berti (2020) who state that „in social contexts characterized by a prominence of power abuse upheld by systemic power that normalizes social relations as taken for granted, compassionate action can involve challenging existing inequities, placing the giver in a vulnerable position of great risk, and necessitating a great deal of personal courage” (Simpson and Berti, 2020, p. 444).

5.1.2.4. The impact of compassion on the leader-member relationship: distance versus closeness

The results of our study have shown that the fact whether the leader-member relationship is considered and intended to be more distant (focused on hierarchy) or close (focused on interpersonal connection) depends on contextual and personal factors. In this context, the Leader-Member-Exchange theory (LMX) as a developmental and dynamic process focuses on the dyadic relationship quality between leader and follower as a social exchange process (Graen and Uhl-Bien, 1995). According to Graen and Scandura (1987) leaders are developing different working relationships with their members and the relationship quality with the member is influencing the effectiveness of the leader. Studies have shown that high-quality relationships, driven by communication, trust or mutual respect and support, correlate with important outcomes such as job satisfaction, commitment or high work performance (Fairhurst and Chandler, 1989; Liden and Maslyn, 1998). Interestingly, the LMX theory does not provide any insights on how the degree of distance or closeness might impact the quality of the relationship between member and leader (and therefore effectiveness and performance). It could be argued that close relationships are beneficial for both leaders and members. However, the results of our study in the context of “distance versus closeness” have revealed contradictory insights. On the one hand, particular members are looking for establishing close, interpersonal relationships by also sharing private information and granting their leader access to their private life. On the other hand,

certain members are clearly distinguishing between the private and professional spheres and therefore define distant and close relationships differently. A similar logic applies for leaders. Additionally, while the participants we interviewed hinted at the fact that compassion brought them closer with their leader or member, some of them recognized some potential difficulties that could stem from this proximity, especially around professional respect, which incidentally is also a LMX dimension. This indicates that compassion at work brings both leaders and members to act in a field of tensions stemming from the maintenance of the hierarchical structure and the partly necessary interplay between the private and professional sphere.

5.1.3. Compassionate leadership as the ability to manage and transcend compassion paradoxes

So far, there is no consensus among researchers about what compassionate leadership truly is. Some argue that compassionate leader behavior is merely a skill of servant leadership (Davenport, 2015). Others have attempted to define its core dimensions that would set it apart from other leadership styles (see Shuck et al., 2019). Worline and Dutton (2017) differentiate between *leading with compassion* (which “entails using a leader’s interpersonal skills to alleviate suffering in work interactions with followers,” p.174) and *leading for compassion* (which “involves becoming a high-level compassion architect,” p.182). The latest research around compassion paradoxes adds a new dimension to what it could mean to be a compassionate leader. Even though paradoxes cannot be resolved, they can be transcended so that an individual or organization can embrace the inherent tensions simultaneously (Smith and Lewis, 2011). Since those tensions are inherent to organizations where “competing demands cannot be resolved but rather continually resurface” (Smith et al., 2017, p. 307), some researchers such as Simpson and Berti encourage us to approach the transcendence of organizational compassion as an ongoing accomplishment. This consideration implies that to be effective, compassionate leaders need to have or develop the ability to continuously transcend those compassion paradoxes, as well as support their members in transcending the paradoxes they find themselves dealing with. This is especially important since, quite ironically, the paradoxes inherent to compassion practices in organizations are sometimes causing some suffering in leaders and members. We would argue that this even creates a deeper responsibility for organizations and their leaders to act towards the facilitation of the transcendence of those paradoxes, since the potential suffering they create might be preventable (Kanov, 2021).

There is no consensus today on how to transcend a paradox. Poole and van de Ven (1989) argued that “it is possible that the paradox may stem from conceptual limitations or flaws in theory or assumptions. To overcome these limitations it is necessary to introduce new concepts or a new perspective” (p. 567). Based on yin-yang philosophy, Zhang et al. (2015) encourage us to see paradoxes as “structurally and individually ambidextrous,” arguing that the two sides “coexist, like yin and yang, depending on and complementing one another to jointly support leader effectiveness in people management” (p.541). More recently, Simpson and Berti (2020) argued for an ongoing model in which “each day, the tensions will present themselves, providing an opportunity to make them salient and deploy cognitive, discursive, and socio-material transcendence strategies to enact wise compassion courageously supported by generative power-to, both systemic and individual.”

We believe that transcending the compassion paradoxes in the workplace by introducing new terms and theory will allow for the humility to accept that those paradoxes will not be solved once and for all but will have to be navigated each day. In turn, this might pave a way towards changing the system and equipping leaders and members systematically to develop their competence further in handling those inevitable tensions that arise from putting the human at the center (Poole and van de Ven, 1989). As we have learned through this study and others, compassion in the workplace is challenging because it is a human, subjective experience. The degree of attention to suffering expected by leaders and members, the expected response, and many other elements vary from one individual to another. Compassion has many faces and cannot be reduced to a box to be ticked, otherwise we would risk for it to be (perceived as) fake or manipulative. However, if we were to develop a new framework that recognizes compassion at work as the new “normal,” including a corresponding structure and processes, and at the same time recognize that leadership today is all about handling paradoxes, we believe that it would allow to develop healthier and more effective practices of compassion in the workplace.

5.2. Limitations and future research

This study is based on a qualitative research approach, entailing limitations. Collecting and analyzing our data, we followed a rigorous methodology and considered quality criteria. The sequential dyadic approach reduces to some extent the risk of social desirability bias, as participants are aware that their statements can be cross-referenced. We explicitly granted both anonymity and confidentiality, explaining no information would be shared with the other part of the dyad. Using carefully worded, open questions, we assured participants no answer was wrong, thus increasing reliable output. Our sample was derived from our wider network and not from a general population. During the recruitment process of the participants, it was observed that potential participants who had positive relationships with their professional counterparts were more willing to participate in this study than those with less positive relationships. While our interviews did reveal (intended) negative (side) effects of compassionate behavior in leader-member dyads and overall organizations, dyads with a lower relationship quality could even stress this aspect more prominently.

Moreover, our sample lacks diversity regarding the gender ratio of the leaders, as the dyads are characterized by male leaders only. Since theory indicates that personal characteristics, such as gender, have an impact on compassionate behavior (Goetz et al., 2010; Dutton et al., 2014; Peticca-Harris, 2019; Banker and Bhal, 2020), this may have influenced the findings of the study. According to the interview data, one employee even suggested that organizations dominated by men can have a deleterious effect on compassionate behavior. Although the researchers considered a homogenous distribution in the recruiting process of the participants, the final sample is dominated by men. Therefore, future research should ensure a larger sample size with an equal ratio of male and female leaders. A comparison of males' and females' perspectives may provide further interesting insights. Since the sample consists only of German leaders and employees from an individualistic cultural

background, it lacks cultural diversity and limits the findings to Western culture. Thus, further research should also consider participants from different cultures to provide a valuable contribution to research. Furthermore, it is also important to note that the interviews were conducted, coded and analyzed in the native language of the interviewees (German).

Due to the small sample size of 12 participants, the results have limited generalizability in the context of business organizations (Malterud et al., 2016). Thus, it seems reasonable to further validate the results of this study by increasing study-size or even turning to a longitudinal study design. Moreover, even though our original interview guideline was not initially designed for covering paradoxes in compassion, future research can build on our results and adapt the interview guideline provided by us accordingly. While our sample was limited in size and to several industries, future research still should consider examining larger samples of leaders and employees from additional industries to investigate the negative (side) effects of compassionate leadership. Further, there is evidence from the interviews that the type of organization, its culture, and its size may be linked to the level of suitability for leader compassion and the influence of power on the relationship. Finally, data collection through the interviews was limited by the current COVID-19 situation and, therefore, could only be conducted *via* video conferences, which could have affected the results. Although the study suggests that working from home due to the pandemic has an impact on compassion between leaders and employees, the scope of this study did not encompass the role of the pandemic. Therefore, this could be an interesting additional aspect for further research.

5.3. Implications for theory

This study contributes to the understanding and critical reflection of paradoxical tensions induced by compassion in the workplace by revealing new paradoxes faced by leader and member. It includes both leaders' and members' perspectives and addresses the call for further research into how firms can authentically reduce employees' suffering and promote their well-being (Frost, 1999; Peus, 2011). As previous research mostly involves theoretical studies, this study contributes by following an explorative empirical approach with the focus on dyads, therefore providing insights and perspectives that have not yet been examined by existing management literature. More precisely, we produce initial evidence for new compassion paradoxes inherent to compassion leader behavior at work, as well as confirm and develop on previously identified paradoxes (Araújo et al., 2019; Simpson and Berti, 2020). Drawing upon the previous works of Simpson et al. (2014b), Araújo et al. (2019), and Simpson et al. (2022), we find indications that leaders often show compassion towards their members not only out of selfless reasons but due to strategy and rationality, calculating the resulting organizational effects, such as an increased commitment and willingness to raise efforts or stay with the team. As all of our six dyads revealed such calculations (either existing, perceived, anticipated), this raises the question to what extent “compassionate leadership” can be seen as such and how to delimit it from other forms of leadership. While compassion is more traditionally associated with altruistic motives, future research on organizational

compassion might want to acknowledge openly and from the beginning the more strategic aspects motivating compassion behavior in the workplace.

At the same time, several dyads showed the potential of over-utilizing leaders' compassionate behavior by members, leaving leaders in the paradoxical situation that showing too much (authentic) compassion will lead to more stress-related suffering by other members. Moreover, our study revealed that members also own certain power and therefore might abuse and exploit the compassionate behavior of their leaders to their benefits – and to the detriment of the organization. Future research should explore deeper the dynamics between leader and member, and shed some more light about the power members have over their compassionate leaders. In addition, since our results also showed that power dynamics are prevalent and are being used even in strong dyadic relationships, it would be of high interest to investigate to which extent the issue of power plays an even more crucial and dominant role when researching weak relationships. We also found indications of leaders allegedly showing compassion which, in fact, belittled and patronized their members or even highlighted their deficiencies. The analysis of our dyads provided limited evidence, but some interviewees reported such situations from previous job experiences. While compassionate leadership does yield a lot of positive results, scholars need to control for negatives in empirical studies. Future research thus cannot continue to solely focus on the positive aspects of compassion but has to include a focus on trade-offs and ambiguous or even paradoxical situations. Addressing power issues in particular will be particularly important in order to facilitate the emergence of real compassionate leadership (Simpson et al., 2014b; Simpson and Berti, 2020). Finally, future studies could focus on bringing to life a new model for compassion at work to transcend the current inherent paradoxes.

5.4. Implications for practice

Our study raises several issues which leaders and members should consider when giving or receiving compassion at work.

First, the paradoxes induced by compassion at work need to be acknowledged. Pretending they do not exist might create false expectations and ironically, more suffering. Instead, we encourage organizations and their leaders to make these tensions salient and engage in dialogue about them. In this acknowledgement, we would also encourage all participants to challenge the “either – or” mindset towards a “both – and” mindset, where they can see the two sides of a coin, like yin and yang, depending on and complementing one another to jointly support bringing more compassion at work.

Second, leadership development programs, independent of a focus on compassionate leadership, should raise awareness among participants concerning dealing with tensions and partially paradoxical situations when showing compassion. Since one of the most critical aspects for leaders is to deal with extreme emotionality of members in certain situations, these programs should also aim at upskilling leaders to react, respectively, to those situations. Moreover, leadership programs also should address how leaders can avoid manipulative or overreaching behavior, offering or even forcing unrequested compassionate behavior upon their members.

Comparably, leaders' sensitivity to the dangers of being perceived as patronizing or even belittling their members must be raised in such programs. Equipping leaders with the ability to communicate the advantages of compassionate behavior as well as drawbacks for the entire team when misused by the members also should be included to raise the overall awareness for appropriate organizational behavior.

Thirdly, leaders and organizations must be aware of the changing perception of compassion over time, which is not only initiated by organizational members but can underlie public perceptions. Thus, practitioners must frequently reflect upon the appropriateness of compassionate behavior shown at any point to avoid a negative backlash of presumed positive behavior. Even more importantly, organizations and its leaders at all levels should reflect on the risk of advertising a compassionate culture without living it practically.

6. Conclusion

We started this paper by highlighting the cost of suffering for individuals and business organizations. We also argued that the amount of suffering in the workplace is likely to continue to increase as companies deal with external and internal challenges in their pursuit of remaining relevant and successful. While compassion has proven to be a natural answer to suffering and has shown to bring many organizational benefits, little is yet known about the role leaders have to play in bringing more compassion to the workplace and how the dynamics between leaders and members in the context of compassion are structured.

Through the analysis of the perceptions and actions of both leaders and members in a dyadic empirical setting, we could reveal novel insights in the context of compassionate leader behavior by identifying six compassion paradoxes faced by leader and members. Our analysis also focused on the impact of social hierarchy in the workplace on compassion paradoxes. Finally, our research findings bring us to argue that finding a way to transcend the compassion paradoxes instead of only balancing them, might help resolve the tensions inherent to those paradoxes more sustainability and build more competence for compassion in the workplace.

Researchers and practitioners can play an important role in transcending these paradoxes and we describe some levers that can be utilized to create an environment where compassion can flourish so that organizations and their people can reap the benefits of alleviating and preventing suffering in the workplace.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Author contributions

CR: conceptualization, writing – original draft, data analysis, writing, and governance. VK: conceptualization, writing – original draft, data analysis, writing, and funding acquisition. BS: writing, review, editing, and funding acquisition. All authors designed the research, contributed to the article, and approved the submitted version.

Funding

The publication fees of this article have been funded by the Academy for Exponential Change GmbH.

Acknowledgments

The authors would like to acknowledge the contribution of Lisa Hösch to the curation of data and the first draft of this paper. The authors would also like to acknowledge the collaboration with the reviewers and editor, whose contributions enabled directly the development of this paper. We are forever grateful for your trust and support throughout this constructive process.

Conflict of interest

Author VK is a founder of the Academy for Exponential Change GmbH. The Academy for Exponential Change GmbH as a legal entity

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